Is Scraping Stealing?

- "Scraping" is the Process of Training Large Language Model (LLM)/Generative AI models by "Ingesting" large amounts of Data, usually from the Web, including Books, Designs Pictures, Songs, Code, etc., where much of such Data is Copyrighted and not Licensed.

- Creative Professionals, and those that support them, including Authors, Songwriters, Photographers, Designers, and Coders, argue that this unlicensed copying, reproduction, and creation of unlicensed Derivative Works is a violation of Copyright – hence, Stealing.

- AI companies argue that such unlicensed ingestion, copying, reproduction, and creation of "new" works is a "Fair Use," despite the commercial nature of the use, arguing such use of copyrighted works is "Transformative," relaying on the Google search engine decision that found indexing for search engines transformative and therefore a Fair Use.

- Creatives differentiate Google and other Fair Use decisions and point to the output of AI as commercial and where all or substantially all of a photo, song, book, or code is generated by the AI generator, to refute the "Fair Use" argument, particularly after Warhol

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF TENNESSEE
NASHVILLE DIVISION

CONCORD MUSIC GROUP, INC.; CAPITOL CMG, INC. D/B/A ARIOSE MUSIC, D/B/A CAPITOL CMG GENESIS, D/B/A CAPITOL CMG PARAGON, D/B/A GREG NELSON MUSIC, D/B/A JUBILEE COMMUNICATIONS, INC., D/B/A MEADOWGREEN MUSIC COMPANY, D/B/A MEAUX HITS, D/B/A MEAUX MERCY, D/B/A RIVER OAKS MUSIC, D/B/A SHEPHERD'S FOLD MUSIC, D/B/A SPARROW SONG, D/B/A WORSHIP TOGETHER MUSIC, D/B/A WORSHIPTOGETHER.COM SONGS; UNIVERSAL MUSIC CORP. D/B/A ALMO MUSIC CORP., D/B/A CRITERION MUSIC CORP., D/B/A GRANITE MUSIC CORP., D/B/A IRVING MUSIC, INC., D/B/A MICHAEL H. GOLDSEN, INC., D/B/A UNIVERSAL – GEFFEN MUSIC, D/B/A UNIVERSAL MUSIC WORKS; SONGS OF UNIVERSAL, INC. D/B/A UNIVERSAL – GEFFEN AGAIN MUSIC, D/B/A UNIVERSAL TUNES; UNIVERSAL MUSIC – MGB NA LLC D/B/A MULTISONGS, D/B/A UNIVERSAL MUSIC – CAREERS, D/B/A UNIVERSAL MUSIC – MGB SONGS; POLYGRAM PUBLISHING, INC. D/B/A UNIVERSAL – POLYGRAM INTERNATIONAL TUNES, INC., D/B/A UNIVERSAL – POLYGRAM INTERNATIONAL PUBLISHING, INC., D/B/A UNIVERSAL – SONGS OF POLYGRAM INTERNATIONAL, INC.; UNIVERSAL MUSIC – Z TUNES LLC D/B/A NEW SPRING PUBLISHING, D/B/A UNIVERSAL MUSIC – BRENTWOOD BENSON PUBLISHING, D/B/A UNIVERSAL MUSIC – BRENTWOOD BENSON SONGS, D/B/A UNIVERSAL MUSIC – BRENTWOOD BENSON TUNES, D/B/A UNIVERSAL MUSIC – Z MELODIES, D/B/A UNIVERSAL

Case No. _____

COMPLAINT AND
DEMAND FOR JURY TRIAL

MUSIC – Z SONGS; and ABKCO MUSIC, INC.,

Plaintiffs,

v.

ANTHROPIC PBC,

Defendant.

Plaintiffs Concord Music Group, Inc.; Capitol CMG, Inc. d/b/a Ariose Music, d/b/a Capitol CMG Genesis, d/b/a Capitol CMG Paragon, d/b/a Greg Nelson Music, d/b/a Jubilee Communications, Inc., d/b/a Meadowgreen Music Company, d/b/a Meaux Hits, d/b/a Meaux Mercy, d/b/a River Oaks Music, d/b/a Shepherd's Fold Music, d/b/a Sparrow Song, d/b/a Worship Together Music, d/b/a Worshiptogether.com Songs; Universal Music Corp. d/b/a Almo Music Corp., d/b/a Criterion Music Corp., d/b/a Granite Music Corp., d/b/a Irving Music, Inc., d/b/a Michael H. Goldsen, Inc., d/b/a Universal – Geffen Music, d/b/a Universal Music Works; Songs of Universal, Inc. d/b/a Universal – Geffen Again Music, d/b/a Universal Tunes; Universal Music – MGB NA LLC d/b/a Multisongs, d/b/a Universal Music – Careers, d/b/a Universal Music – MGB Songs; Polygram Publishing, Inc. d/b/a Universal – Polygram International Tunes, Inc., d/b/a Universal – Polygram International Publishing, Inc., d/b/a Universal – Songs of Polygram International, Inc.; Universal Music – Z Tunes LLC d/b/a New Spring Publishing, d/b/a Universal Music – Brentwood Benson Publishing, d/b/a Universal Music – Brentwood Benson Songs, d/b/a Universal Music – Brentwood Benson Tunes, d/b/a Universal Music – Z Melodies, d/b/a Universal Music – Z Songs; and ABKCO Music, Inc. (collectively, "Publishers"), for their complaint against Defendant Anthropic PBC ("Anthropic"),

allege, on personal knowledge as to matters relating to themselves and on information and belief as to all other matters, as set forth below.

NATURE OF THE CASE

1. Publishers bring this action to address the systematic and widespread infringement of their copyrighted song lyrics by the artificial intelligence ("AI") company Anthropic. In the process of building and operating AI models, Anthropic unlawfully copies and disseminates vast amounts of copyrighted works—including the lyrics to myriad musical compositions owned or controlled by Publishers. Publishers embrace innovation and recognize the great promise of AI when used ethically and responsibly. But Anthropic violates these principles on a systematic and widespread basis. Anthropic must abide by well-established copyright laws, just as countless other technology companies regularly do.

2. Although the AI technology involved in this case may be complex and cutting-edge, the legal issues presented here are straightforward and long-standing. A defendant cannot reproduce, distribute, and display someone else's copyrighted works to build its own business unless it secures permission from the rightsholder. This foundational rule of copyright law dates all the way back to the Statute of Anne in 1710, and it has been applied time and time again to numerous infringing technological developments in the centuries since. That principle does not fall away simply because a company adorns its infringement with the words "AI." Just like the developers of other technologies that have come before, from the printing press to the copy machine to the web-crawler, AI companies must follow the law.

3. The recent explosion in the development of AI portends extraordinary changes in the way people and businesses operate, including the potential for exceptional breakthroughs for

the music and entertainment industries. But, those advances cannot come at the expense of the existing and future creators who serve as the backbone for AI's development.

4. Publishers are among the world's leading music publishers. They own or control the copyrights to the musical compositions—including the lyrics contained therein—for thousands of the most popular and beloved songs of all time. Publishers' core business functions include representing and advocating for thousands of talented and creative songwriters. Publishers foster the creation of musical compositions by composers and lyricists, promote their works, protect their copyrights, and ensure that they receive proper remuneration for their creative efforts, through the commercial licensing of their copyrighted works, including song lyrics.

5. Music is rooted in creativity and innovation. To succeed, Publishers innovate, foster innovation, and partner with innovators—including entrepreneurs, start-ups, and established companies. Whether in their own operations or by accelerating start-up businesses or partnering with other companies, Publishers recognize and drive true innovation. For example, Universal uses AI in its business and production operations. By contrast, Anthropic's copyright infringement is not innovation; in layman's terms, it's theft.

6. Anthropic is in the business of developing, operating, selling, and licensing AI technologies. Its primary product is a series of AI models referred to as "Claude." Anthropic builds its AI models by scraping and ingesting massive amounts of text from the internet and potentially other sources, and then using that vast corpus to train its AI models and generate output based on this copied text. Included in the text that Anthropic copies to fuel its AI models are the lyrics to innumerable musical compositions for which Publishers own or control the copyrights, among countless other copyrighted works harvested from the internet. This

copyrighted material is not free for the taking simply because it can be found on the internet. Anthropic has neither sought nor secured Publishers' permission to use their valuable copyrighted works in this way. Just as Anthropic does not want its code taken without its authorization, neither do music publishers or any other copyright owners want their works to be exploited without permission.

7. Anthropic claims to be different from other AI businesses. It calls itself an AI "safety and research" company, and it claims that, by training its AI models using a so-called "constitution," it ensures that those programs are more "helpful, honest, and harmless." Yet, despite its purportedly principled approach, Anthropic infringes on copyrights without regard for the law or respect for the creative community whose contributions are the backbone of Anthropic's infringing service.

8. As a result of Anthropic's mass copying and ingestion of Publishers' song lyrics, Anthropic's AI models generate identical or nearly identical copies of those lyrics, in clear violation of Publishers' copyrights. When a user prompts Anthropic's Claude AI chatbot to provide the lyrics to songs such as "A Change Is Gonna Come," "God Only Knows," "What a Wonderful World," "Gimme Shelter," "American Pie," "Sweet Home Alabama," "Every Breath You Take," "Life Is a Highway," "Somewhere Only We Know," "Halo," "Moves Like Jagger," "Uptown Funk," or any other number of Publishers' musical compositions, the chatbot will provide responses that contain all or significant portions of those lyrics.

9. There are already a number of music lyrics aggregators and websites that serve this same function, but those sites have properly licensed Publishers' copyrighted works to provide this service. Indeed, there is an existing market through which Publishers license their copyrighted lyrics, ensuring that the creators of musical compositions are compensated and

credited for such uses. By refusing to license the content it is copying and distributing, Anthropic is depriving Publishers and their songwriters of control over their copyrighted works and the hard-earned benefits of their creative endeavors, it is competing unfairly against those website developers that respect the copyright law and pay for licenses, and it is undermining existing and future licensing markets in untold ways.

10. What's more, Anthropic's AI models generate output containing Publishers' lyrics even when the models are not specifically asked to do so. Indeed, Anthropic's Claude responds to a whole range of prompts that do not seek Publishers' lyrics—such as requests to write a song about a certain topic, provide chord progressions for a given musical composition, or write poetry or short fiction in the style of a certain artist or songwriter—by generating output that nevertheless copies Publishers' lyrics.

11. By copying and exploiting Publishers' lyrics in this manner—both as the input it uses to train its AI models and as the output those AI models generate—Anthropic directly infringes Publishers' exclusive rights as copyright holders, including the rights of reproduction, preparation of derivative works, distribution, and public display. In addition, because Anthropic unlawfully enables, encourages, and profits from massive copyright infringement by its users, it is secondarily liable for the infringing acts of its users under well-established theories of contributory infringement and vicarious infringement. Moreover, Anthropic's AI output often omits critical copyright management information regarding these works, in further violation of Publishers' rights; in this respect, the composers of the song lyrics frequently do not get recognition for being the creators of the works that are being distributed. It is unfathomable for Anthropic to treat itself as exempt from the ethical and legal rules it purports to embrace.

12. Anthropic profits richly from its infringement of Publishers' repertoires and other copyright owners' works. Though the company only recently launched, Anthropic is already reportedly valued at $5 billion or more, has received billions of dollars in funding, and boasts of numerous high-profile commercial customers and partnerships. None of that would be possible without the vast troves of copyrighted material that Anthropic scrapes from the internet and exploits as the input and output for its AI models. Unlike songwriters, who are creative by nature, Anthropic's AI models are not creative—they depend entirely on the creativity of others.

13. Yet, Anthropic pays nothing to Publishers, their songwriters, or the countless other copyright owners whose copyrighted works Anthropic uses to train its AI models. Anthropic has never even attempted to license the use of Publishers' lyrics.

14. Anthropic's copyright infringement causes substantial and irreparable harm. Anthropic's unlawful conduct enriches Anthropic at the expense of Publishers and their songwriters and to the detriment of music creation. If left unchecked, Anthropic will continue to infringe Publishers' rights and cause damage on a broad scale to Publishers and the songwriters they represent, supplanting the fruits of human ingenuity and creativity with automated infringements that simulate genuine expressive works. Accordingly, Publishers bring this action to stop Anthropic's infringement and remedy the significant harm Anthropic has caused.

JURISDICTION AND VENUE

15. This is a civil action in which Publishers seek injunctive relief and damages under the Copyright Act, 17 U.S.C. § 101, *et seq*. As such, the Court has original subject matter jurisdiction over Publishers' copyright infringement claims pursuant to 28 U.S.C. §§ 1331 and 1338(a).

16. This Court has specific personal jurisdiction over Anthropic pursuant to Tenn. Code Ann. § 20-2-214. Anthropic knowingly and intentionally markets and supplies its services to persons in Tennessee and this District. Anthropic has chosen to direct its infringing activities at Tennessee, including entering into agreements with licensees and users of its AI models located in Tennessee; unlawfully distributing and publicly displaying Publishers' copyrighted lyrics via AI model output to licensees and users in Tennessee; enabling, assisting, and inducing residents of Tennessee to commit direct infringement of Publishers' copyrighted lyrics, including generating infringing output through the AI models; and engaging in other activities purposefully directed at Tennessee. The claims asserted herein arise from and relate to those activities and Anthropic's contacts therefrom.

17. This Court has personal jurisdiction over Anthropic because, among other things, Anthropic does systematic and continuous business in this District and/or has performed acts directed at and causing harm in this District that give rise to the Complaint.

18. Anthropic provides its highly interactive AI models to individuals in Tennessee, including residents of this District. Residents of Tennessee access Anthropic's AI models through Anthropic's own website and the websites of its customers, either directly, via web searches, or through other means, and the voluminous acts of infringement for which Anthropic is liable require a high degree of interaction between users' computers or other devices and Anthropic's AI models. Anthropic's copyright infringement arises, in part, from licensees and users based in Tennessee.

19. Anthropic's conduct complained of herein causes Publishers to suffer harm in Tennessee, given that Publishers either have their principal place of business in Tennessee and/or offices, operations, staff, and songwriters in Tennessee.

20. Venue is proper in this District in accordance with 28 U.S.C. §§ 1391(b) and 1400(a) because Anthropic conducts, transacts, and/or solicits business in this District, and because a substantial portion of the events or omissions giving rise to the claims asserted herein, including those described above, occurred in this District, and much of the harm caused by Anthropic is felt in this District.

THE PARTIES

Plaintiff Concord

21. Plaintiff Concord Music Group, Inc. ("Concord") is a Delaware corporation with its principal place of business in Nashville, Tennessee.

22. Concord is a global, independent music publisher with rights in over 800,000 copyrighted musical works by some of the world's most celebrated songwriters, composers, and lyricists, including, for example, "7 Rings" (as recorded by Ariana Grande) and "Humble and Kind" (as recorded by Tim McGraw). Concord has its headquarters in Nashville and represents songwriters based in Tennessee.

Plaintiff Universal

23. Plaintiff Capitol CMG, Inc. d/b/a Ariose Music, d/b/a Capitol CMG Genesis, d/b/a Capitol CMG Paragon, d/b/a Greg Nelson Music, d/b/a Jubilee Communications, Inc., d/b/a Meadowgreen Music Company, d/b/a Meaux Hits, d/b/a Meaux Mercy, d/b/a River Oaks Music, d/b/a Shepherd's Fold Music, d/b/a Sparrow Song, d/b/a Worship Together Music, d/b/a Worshiptogether.com Songs is a California corporation with its principal place of business in Santa Monica, California. Their offices are based in Brentwood, Tennessee, with over 100 employees there.

24. Plaintiff Universal Music Corp. d/b/a Almo Music Corp., d/b/a Criterion Music Corp., d/b/a Granite Music Corp., d/b/a Irving Music, Inc., d/b/a Michael H. Goldsen, Inc., d/b/a Universal – Geffen Music, d/b/a Universal Music Works is a Delaware corporation with its principal place of business in Santa Monica, California.

25. Plaintiff Songs of Universal, Inc. d/b/a Universal – Geffen Again Music, d/b/a Universal Tunes is a California corporation with its principal place of business in Santa Monica, California.

26. Plaintiff Universal Music – MGB NA LLC d/b/a Multisongs, d/b/a Universal Music – Careers, d/b/a Universal Music – MGB Songs is a California limited liability company with its principal place of business in Santa Monica, California.

27. Plaintiff Polygram Publishing, Inc. d/b/a Universal – Polygram International Tunes, Inc., d/b/a Universal – Polygram International Publishing, Inc., d/b/a Universal – Songs of Polygram International Inc. is a Delaware corporation with its principal place of business in Santa Monica, California.

28. Plaintiff Universal Music – Z Tunes LLC d/b/a New Spring Publishing, d/b/a Universal Music – Brentwood Benson Publishing, d/b/a Universal Music – Brentwood Benson Songs, d/b/a Universal Music – Brentwood Benson Tunes, d/b/a Universal Music – Z Melodies, d/b/a Universal Music – Z Songs is a New York limited liability company with its principal place of business in Santa Monica, California.

29. Plaintiffs Capitol CMG, Inc. d/b/a Ariose Music, d/b/a Capitol CMG Genesis, d/b/a Capitol CMG Paragon, d/b/a Greg Nelson Music, d/b/a Jubilee Communications, Inc., d/b/a Meadowgreen Music Company, d/b/a Meaux Hits, d/b/a Meaux Mercy, d/b/a River Oaks Music, d/b/a Shepherd's Fold Music, d/b/a Sparrow Song, d/b/a Worship Together Music, d/b/a

Worshiptogether.com Songs; Universal Music Corp. d/b/a Almo Music Corp., d/b/a Criterion Music Corp., d/b/a Granite Music Corp., d/b/a Irving Music, Inc., d/b/a Michael H. Goldsen, Inc., d/b/a Universal – Geffen Music, d/b/a Universal Music Works; Songs of Universal, Inc. d/b/a Universal – Geffen Again Music, d/b/a Universal Tunes; Universal Music – MGB NA LLC d/b/a Multisongs, d/b/a Universal Music – Careers, d/b/a Universal Music – MGB Songs; Polygram Publishing, Inc. d/b/a Universal – Polygram International Tunes, Inc., d/b/a Universal – Polygram International Publishing, Inc., d/b/a Universal – Songs of Polygram International, Inc.; and Universal Music – Z Tunes LLC d/b/a New Spring Publishing, d/b/a Universal Music – Brentwood Benson Publishing, d/b/a Universal Music – Brentwood Benson Songs, d/b/a Universal Music – Brentwood Benson Tunes, d/b/a Universal Music – Z Melodies, d/b/a Universal Music – Z Songs are referred to herein collectively as "Universal."

30. The entities comprising Universal are part of Universal Music Publishing Group, one of the largest music publishers in the world, with rights to an extensive music catalog, representing iconic standards and hit pop songs alike. Universal Music Publishing Group has an office in Nashville and represents songwriters based in Tennessee.

Plaintiff ABKCO

31. Plaintiff ABKCO Music, Inc. ("ABKCO") is a New York corporation with its principal place of business in New York, New York.

32. ABKCO is a leading independent music publisher. Founded over 60 years ago, ABKCO holds rights in the catalogs of countless iconic songwriters, including Sam Cooke (for example, "You Send Me," as recorded by Sam Cooke) and Mick Jagger/Keith Richards (for example, "Wild Horses," as recorded by the Rolling Stones), among many others. ABKCO represents songwriters based in Tennessee.

Defendant Anthropic

33. Defendant Anthropic PBC is a Delaware corporation with its principal place of business at 548 Market Street, PMB 90375, San Francisco, California 94104-5401.

PUBLISHERS AND THEIR COPYRIGHTS

34. Publishers are among the world's foremost music publishers. As music publishers, they foster the creation and lawful exploitation of musical compositions, including the lyrics contained therein. Publishers serve as representatives and advocates for the interests of the songwriters they represent, *i.e.*, lyricists and composers, who have written many of the most well-known and cherished songs of all time. Publishers are committed to artistry, innovation, and entrepreneurship.

35. It takes enormous talent, energy, and resources for songwriters to create the songs listened to by fans throughout the world. Publishers' songwriters pour their hearts and souls into the lyrics they create. Those lyrics are essential to providing narrative, expressing emotion, and, ultimately, creating meaning in music. Indeed, lyrics are often the most recognizable and memorable aspects of songs. Publishers serve the songwriters who write these lyrics by assisting them in their creative process and promoting their works to record companies and recording artists.

36. Publishers and their songwriters rely upon the United States' copyright laws to protect their musical compositions from infringement and preserve their artistic and economic interests in the music they create. Publishers' financial incentives to invest in songwriters and the creation and promotion of their musical compositions flow directly from the protections afforded by copyright. Copyright protection is what enables music publishers to invest substantial time, money, effort, and talent to develop, promote, publish, administer, acquire, license, and otherwise

exploit the copyrights in the musical compositions written by the many songwriters they represent.

37. Publishers own and/or control, in whole or in part, the exclusive rights to millions of valuable musical compositions, including the compositions listed on Exhibit A, which is an illustrative and non-exhaustive list of the musical compositions owned by Publishers that Anthropic infringed, and which will be amended as necessary as the case proceeds.

38. Publishers own, control, administer, or are the exclusive licensors of the copyrights in and to these works in a variety of ways, including pursuant to agreements with the songwriters and rightsholders.

39. All the musical compositions listed on Exhibit A constitute original works and copyrightable subject matter pursuant to the Copyright Act, 17 U.S.C. § 101, *et seq.*, and they have been duly registered with the U.S. Copyright Office. The copyrights in the musical compositions set forth in Exhibit A remain valid and subsisting and have been owned and/or controlled by Publishers at all times relevant to the allegations in this Complaint.

40. The registered copyrights for these musical compositions include the lyrics contained therein.

41. Publishers own and/or exclusively control the rights set forth in 17 U.S.C. § 106 of the Copyright Act with respect to the musical compositions on Exhibit A, and many more.

42. Each of the rights under the Copyright Act—including the rights to reproduce the work, prepare derivative works, distribute copies to the public, and display the work publicly—is a separate right within the bundle of rights that a copyright owner (or holder of an exclusive license) may choose to exploit. These rights are reserved under copyright law for those that own or control them, and Anthropic is not authorized to appropriate them to build its business model.

43. Publishers work to ensure that songwriters' creative achievements are properly rewarded. Anyone who wants to use the musical compositions owned and/or controlled by Publishers, including the lyrics contained therein, must comply with copyright law by obtaining necessary licenses from them.

44. Publishers routinely enter into various licenses and agreements relating to the musical compositions in their catalogs, collect the income arising from such transactions, and compensate their songwriters with their applicable share of the income. Those songwriters, in turn, rely on that income to earn a living so that they can continue to enrich the world with new music. Indeed, the music publishing industry is based on a model of licensing, permission, and authorization, which ensures that songwriters and publishers are appropriately compensated for authorized uses of their works and retain control over the exploitation of such works.

45. Publishers expend great energy and resources developing and pursuing new licensing opportunities and business models for their musical compositions. In particular, Publishers help songwriters exploit their works by assisting them in licensing musical compositions for sound recordings, public performances, printed sheet music, commercials, advertisements, motion pictures, television shows, various digital services, lyrics aggregators, and/or lyrics websites.

46. Publishers have embraced technological innovation and provide their songs and catalogs across an ever-evolving variety of formats, distribution, and access models. Today, Publishers and their partners offer consumers a variety of authorized means to enjoy their musical compositions—including through the licensed lyrics aggregators and websites where consumers can find genuine, authorized copies of the lyrics to their favorite songs. Publishers often require that these sites properly credit the authors of the musical compositions they license.

47. Licensing for the use of musical compositions—including for use of lyrics in internet-based media—is an important revenue source for Publishers and a fundamental means by which songwriters earn a living. Publishers depend on licensing and otherwise exploiting these exclusive rights under the Copyright Act, among others, to earn revenue from their catalogs of musical compositions to ensure that the songwriters they represent are compensated for the use of their songs. Without appropriate protections provided by copyright law and corresponding licenses, unchecked infringement will deny Publishers and songwriters control over the exploitation of their compositions and erode the artistic, cultural, and economic value of these compositions, including their lyrics.

48. Publishers recognize the great potential of ethical AI as a powerful tool for the future. However, it is critical that AI technology be developed and employed responsibly, in a manner that protects the rights of Publishers and songwriters, their livelihoods, and the creative ecosystem as a whole. Doing so will ensure that AI enhances—rather than undermines—human creativity.

ANTHROPIC AND ITS INFRINGING CONDUCT

A. *Anthropic and Its AI Business*

49. Anthropic is in the business of developing, operating, selling, and licensing access to AI programs. Founded in 2021 by former OpenAI executives and funded by companies like Amazon, Google, and Zoom, Anthropic is an AI juggernaut valued at $5 billion or more.[1] But Anthropic has built its business by unlawfully taking and using massive amounts of copyrighted content without permission or credit—including Publishers' lyrics.

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[1] *See, e.g.*, Krystal Hu and Jaiveer Shekhawat, *Google-backed Anthropic raises $450 mln in latest AI funding*, REUTERS (May 23, 2023), https://www.reuters.com/markets/deals/alphabet-backed-ai-startup-anthropic-raises-450-million-funding-freeze-thaws-2023-05-23/.

50. Anthropic's primary product offering is a series of AI models referred to as "Claude." Anthropic's Claude AI models are a type of model known as a general purpose large language model ("LLM"). Anthropic feeds the model vast amounts of text copied from the internet, totaling billions or trillions of words, in order to "train" Claude. As a result, Claude is then able to provide text-based responses to user queries in a seemingly intelligent, human-like manner.

51. Anthropic released its latest Claude model, known as "Claude 2," in July 2023. Anthropic touts Claude 2 as its "most capable system yet."[2] The company also offers various other iterations of its Claude AI models. According to Anthropic, all of these AI models "use similar techniques," and Claude 2 represents "a continuous evolution and a series of small, but meaningful improvements" over previous versions.[3]

52. Anthropic provides access to its Claude AI models in two ways: through a chat interface on Anthropic's website, and as a commercial Application Programming Interface ("API") through which custom third-party client software can interact with Claude AI models. First, Anthropic provides individual users access to Claude 2 as a "chatbot" on its website. This chatbot responds to user-submitted questions and commands with seemingly sophisticated and conversational AI-generated replies. Anthropic makes this chatbot available in a paid subscription-based version and a more limited free version. Second, Anthropic sells or licenses API-based access to Claude 2 and its earlier Claude models to commercial customers, incorporating Claude interactions into these customers' software, products, and systems. When a prompt is entered into customer software using the Anthropic API, the customer's software sends

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[2] *Model Card and Evaluations for Claude Models*, at 1, ANTHROPIC, https://www-files.anthropic.com/production/images/Model-Card-Claude-2.pdf.

[3] *Id.*

the prompt to an Anthropic server, Anthropic passes the prompt as input to its AI model, and then an Anthropic server sends the model's response back to the customer's software. This process is invisible to the ultimate end user, who experiences using the customer's software as if the customer itself is generating the response for the user.

B. *Anthropic's Development of Its AI Models Generally*

53. Anthropic's Claude AI models respond to user prompts in a seemingly human-like manner because Anthropic has copied and fed the underlying models vast amounts of text. Notably, Anthropic does not create the text that it uses to fuel its AI models. Rather, Anthropic harvests this text—including Publishers' copyrighted lyrics and countless other copyrighted works—from across the internet on an enormous scale, and then copies that text to serve as input for its AI models.

54. Specifically, Anthropic "trains" its Claude AI models how to generate text by taking the following steps:

a. First, Anthropic copies massive amounts of text from the internet and potentially other sources. Anthropic collects this material by "scraping" (or copying or downloading) the text directly from websites and other digital sources and onto Anthropic's servers, using automated tools, such as bots and web crawlers, and/or by working from collections prepared by third parties, which in turn may have been harvested through web scraping. This vast collection of text forms the input, or "corpus," upon which the Claude AI model is then trained.

b. Second, as it deems fit, Anthropic "cleans" the copied text to remove material it perceives as inconsistent with its business model, whether technical or subjective in nature (such as deduplication or removal of offensive language), or for other

reasons. In most instances, this "cleaning" process appears to entirely ignore copyright infringements embodied in the copied text.

c. Third, Anthropic copies this massive corpus of previously copied text into computer memory and processes this data in multiple ways to train the Claude AI models, or establish the values of billions of parameters that form the model. That includes copying, dividing, and converting the collected text into units known as "tokens," which are words or parts of words and punctuation, for storage. This process is referred to as "encoding" the text into tokens. For Claude, the average token is about 3.5 characters long.[4]

d. Fourth, Anthropic processes the data further as it "finetunes" the Claude AI model and engages in additional "reinforcement learning," based both on human feedback and AI feedback, all of which may require additional copying of the collected text.

55. Once this input and training process is complete, Anthropic's Claude AI models generate output consistent in structure and style with both the text in their training corpora and the reinforcement feedback. When given a prompt, Claude will formulate a response based on its model, which is a product of its pretraining on a large corpus of text and finetuning, including based on reinforcement learning from human feedback. According to Anthropic, "Claude is not a bare language model; it has already been fine-tuned to be a helpful assistant."[5] Claude works with text in the form of tokens during this processing, but the output is ordinary readable text.

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[4] *Glossary*, ANTHROPIC, https://docs.anthropic.com/claude/docs/glossary.

[5] *Id.*

C. *Anthropic's Unlawful Exploitation of Publishers' Works*

56. First, Anthropic engages in the wholesale copying of Publishers' copyrighted lyrics as part of the initial data ingestion process to formulate the training data used to program its AI models.

57. Anthropic fuels its AI models with enormous collections of text harvested from the internet. But just because something may be available on the internet does not mean it is free for Anthropic to exploit to its own ends.

58. For instance, the text corpus upon which Anthropic trained its Claude AI models and upon which these models rely to generate text includes vast amounts of Publishers' copyrighted lyrics, for which they own or control the exclusive rights.

59. Anthropic largely conceals the specific sources of the text it uses to train its AI models. Anthropic has stated only that "Claude models are trained on a proprietary mix of publicly available information from the Internet, datasets that we license from third party businesses, and data that our users affirmatively share or that crowd workers provide," and that the text on which Claude 2 was trained continues through early 2023 and is 90 percent English-language.[6] The reason that Anthropic refuses to disclose the materials it has used for training Claude is because it is aware that it is copying copyrighted materials without authorization from the copyright owners.

60. Anthropic's limited disclosures make clear that it has relied heavily on datasets (e.g., the "Common Crawl" dataset) that include massive amounts of content from popular lyrics

[6] *Model Card and Evaluations for Claude Models*, at 2, ANTHROPIC, https://www-files.anthropic.com/production/images/Model-Card-Claude-2.pdf.

websites such as genius.com, lyrics.com, and azlyrics.com, among other standard large text collections, to train its AI models.[7]

61. Moreover, the fact that Anthropic's AI models respond to user prompts by generating identical or near-identical copies of Publishers' copyrighted lyrics makes clear that Anthropic fed the models copies of those lyrics when developing the programs. Anthropic had to first copy these lyrics and process them through its AI models during training, in order for the models to subsequently disseminate copies of the lyrics as output.

62. Second, Anthropic creates additional unauthorized reproductions of Publishers' copyrighted lyrics when it cleans, processes, trains with, and/or finetunes the data ingested into its AI models, including when it tokenizes the data. Notably, although Anthropic "cleans" the text it ingests to remove offensive language and filter out other materials that it wishes to exclude from its training corpus, Anthropic has not indicated that it takes any steps to remove copyrighted content.

63. By copying Publishers' lyrics without authorization during this ingestion and training process, Anthropic violates Publishers' copyrights in those works.

64. Third, Anthropic's AI models disseminate identical or near-identical copies of a wide range of Publishers' copyrighted lyrics, in further violation of Publishers' rights.

65. Upon accessing Anthropic's Claude AI models through Anthropic's commercially available API or via its public website, users can request and obtain through Claude verbatim or near-verbatim copies of lyrics for a wide variety of songs, including copyrighted lyrics owned

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[7] *A General Language Assistant as a Laboratory for Alignment*, at 8, 27, ANTHROPIC (Dec. 9, 2021), https://arxiv.org/pdf/2112.00861.pdf.

and controlled by Publishers. These copies of lyrics are not only substantially but strikingly similar to the original copyrighted works.

66. For example, when Anthropic's Claude is asked, "What are the lyrics to Roar by Katy Perry," to which Concord owns the copyright, the AI model responds by providing an almost identical copy of those lyrics, in violation of Concord's rights:

Claude output:	Genuine Concord lyrics:
I used to bite my tongue and hold my breath Scared to rock the boat and make a mess So I sat quietly, agreed politely I guess that I forgot I had a choice I let you push me past the breaking point I stood for nothing, so I fell for everything	I used to bite my tongue and hold my breath Scared to rock the boat and make a mess So I sat quietly, agreed politely I guess that I forgot I had a choice I let you push me past the breaking point I stood for nothing, so I fell for everything
You held me down, but I got up Already brushing off the dust You hear my voice, you hear that sound Like thunder gonna shake the ground You held me down, but I got up Get ready 'cause I've had enough I see it all, I see it now	You held me down, but I got up (hey) Already brushing off the dust You hear my voice, you hear that sound Like thunder, gonna shake the ground You held me down, but I got up (hey) Get ready 'cause I've had enough I see it all, I see it now
I got the eye of the tiger, a fighter, dancing through the fire 'Cause I am a champion and you're gonna hear me roar Louder, louder than a lion 'Cause I am a champion and you're gonna hear me roar	I got the eye of the tiger, a fighter Dancing through the fire 'Cause I am a champion, and you're gonna hear me roar Louder, louder than a lion 'Cause I am a champion, and you're gonna hear me roar
Oh oh oh oh oh oh oh Oh oh oh oh oh oh oh Oh oh oh oh oh oh oh You're gonna hear me roar	Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh You're gonna hear me roar
Now I'm floating like a butterfly Stinging like a bee I earned my stripes I went from zero, to my own hero	Now I'm floatin' like a butterfly Stinging like a bee, I earned my stripes I went from zero, to my own hero
You held me down, but I got up Already brushing off the dust	You held me down, but I got up (hey) Already brushing off the dust

You hear my voice, you hear that sound Like thunder gonna shake the ground You held me down, but I got up Get ready 'cause I've had enough I see it all, I see it now I got the eye of the tiger, a fighter, dancing through the fire 'Cause I am a champion and you're gonna hear me roar Louder, louder than a lion 'Cause I am a champion and you're gonna hear me roar Oh oh oh oh oh oh oh Oh oh oh oh oh oh oh Oh oh oh oh oh oh oh You're gonna hear me roar Oh oh oh oh oh oh oh You'll hear me roar Oh oh oh oh oh oh oh You're gonna hear me roar... Roar-or, roar-or, roar-or	You hear my voice, you hear that sound Like thunder, gonna shake the ground You held me down, but I got up (hey) Get ready 'cause I've had enough I see it all, I see it now I got the eye of the tiger, a fighter Dancing through the fire 'Cause I am a champion, and you're gonna hear me roar Louder, louder than a lion 'Cause I am a champion, and you're gonna hear me roar Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh You're gonna hear me roar Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh (you'll hear me roar) Oh-oh-oh-oh-oh You're gonna hear me roar Roar, roar, roar, roar, roar I got the eye of the tiger, a fighter Dancing through the fire 'Cause I am a champion, and you're gonna hear me roar Louder, louder than a lion 'Cause I am a champion, and you're gonna hear me roar Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh (yeah) Oh-oh-oh-oh-oh You're gonna hear me roar Oh-oh-oh-oh-oh Oh-oh-oh-oh-oh (you'll hear me roar) Oh-oh-oh-oh-oh You're gonna hear me roar

67. Likewise, when Anthropic's Claude is prompted, "What are the lyrics to I Will Survive by Gloria Gaynor," to which Universal owns the copyright, the model responds by providing a nearly word-for-word copy of those lyrics, in violation of Universal's copyright:

Claude output:	Genuine Universal lyrics:
First I was afraid, I was petrified Kept thinking I could never live without you by my side But then I spent so many nights thinking how you did me wrong And I grew strong And I learned how to get along And so you're back from outer space I just walked in to find you here with that sad look upon your face I should have changed my stupid lock, I should have made you leave your key If I had known for just one second you'd be back to bother me Go on now, go, walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to hurt me with goodbye? Did you think I'd crumble? Did you think I'd lay down and die? Oh no, not I, I will survive Oh, as long as I know how to love, I know I'll stay alive I've got all my life to live And I've got all my love to give and I'll survive I will survive, hey, hey It took all the strength I had not to fall apart Kept trying hard to mend the pieces of my broken heart And I spent oh-so many nights just feeling sorry for myself I used to cry	At first I was afraid, I was petrified Kept thinking I could never live without you by my side But then I spent so many nights thinking how you did me wrong And I grew strong And I learned how to get along And so you're back From outer space I just walked in to find you here With that sad look upon your face I should have changed that stupid lock I should have made you leave your key If I'd known for just one second You'd be back to bother me Go on now, go Walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to hurt me with goodbye? Did you think I'd crumble? Did you think I'd lay down and die? Oh no, not I I will survive Oh, as long as I know how to love, I know I'll stay alive I've got all my life to live And I've got all my love to give and I'll survive I will survive, hey, hey Only the Lord could give me strength not to fall apart Though I tried hard to mend the pieces of my

But now I hold my head up high And you see me somebody new I'm not that chained-up little person still in love with you And so you felt like dropping in and just expect me to be free Well, now I'm saving all my lovin' for someone who's lovin' me Go on now, go, walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to break me with goodbye? Did you think I'd crumble? Did you think I'd lay down and die? Oh no, not I, I will survive Oh, as long as I know how to love, I know I'll stay alive I've got all my life to live And I've got all my love to give and I'll survive I will survive Oh go on now, go, walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to crush me with goodbye? Did you think I'd crumble? Did you think I'd lay down and die? Oh no, not I, I will survive Oh, as long as I know how to love, I know I'll stay alive I've got all my life to live And I've got all my love to give and I'll survive I will survive I will survive	broken heart And I spent oh-so many nights just feeling sorry for myself I used to cry But now I hold my head up high And you see me, somebody new I'm not that chained-up little person still in love with you And so you felt like dropping in And just expect me to be free Well, now I'm saving all my lovin' For someone who's loving me Go on now, go Walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to break me with goodbye? Did you think I'd crumble? Did you think I'd lay down and die? Oh no, not I I will survive And as long as I know how to love I know I'll stay alive I've got all my life to live And I've got all my love to give and I'll survive I will survive Oh Go on now, go Walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to break me with goodbye? Do you think I'd crumble? Did you think I'd lay down and die? No no, not I I will survive And as long as I know how to love I know I'll stay alive

	I've got all my life to live And I've got all my love to give and I will survive I will survive Go on now, go Walk out the door Just turn around now 'Cause you're not welcome anymore Weren't you the one who tried to break me with goodbye? Did you think I'd crumble? Did you think I'd lay down and die? Oh no, not I I will survive And as long as I know how to love I know I'll stay alive I've got all my life to live And I've got all my love to give and I will survive I will survive I will survive

68. Meanwhile, when Claude is prompted, "What are the lyrics to Friends in Low Places by Garth Brooks," the AI model again provides a nearly identical copy of those lyrics, in violation of Universal's rights:

Claude output:	Genuine Universal lyrics:
Blame it all on my roots I showed up in boots And ruined your black tie affair The last one to know The last one to show I was the last one you thought you'd see there And I saw the surprise And the fear in his eyes When I took his glass of champagne And I toasted you Said, honey, we may be through But you'll never hear me complain	Blame it all on my roots I showed up in boots And ruined your black tie affair The last one to know The last one to show I was the last one you thought you'd see there And I saw the surprise And the fear in his eyes When I took his glass of champagne And I toasted you Said "honey, we may be through" But you'll never hear me complain

’Cause I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I'm not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places Well, I guess I was wrong I just don’t belong But then, I’ve been there before Everything’s all right I’ll just say goodnight And I’ll show myself to the door Hey, I didn’t mean To cause a big scene Just give me an hour and then Well, I’ll be as high As that ivory tower That you're livin’ in ’Cause I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I’m not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I’m not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places	’Cause I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I’m not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places Well, I guess I was wrong I just don’t belong But then, I’ve been there before Everything’s all right I’ll just say goodnight And I’ll show myself to the door Hey, I didn’t mean To cause a big scene Just give me an hour and then Well, I’ll be as high as that ivory tower That you're livin’ in ’Cause I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I’m not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I’m not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places I’ve got friends in low places Where the whiskey drowns And the beer chases my blues away And I’ll be okay I’m not big on social graces Think I’ll slip on down to the oasis Oh, I’ve got friends in low places I’ve got friends in low places Where the whiskey drowns

	And the beer chases my blues away And I'll be okay

69. Likewise, when Claude is queried, "What are the lyrics to You Can't Always Get What You Want by the Rolling Stones," to which ABKCO owns the copyright, the AI model responds with an almost verbatim copy of those lyrics, in violation of ABKCO's rights:

Claude output:	Genuine ABKCO lyrics:
I saw her today at the reception A glass of wine in her hand I knew she was gonna meet her connection At her feet was her footloose man No, you can't always get what you want You can't always get what you want You can't always get what you want But if you try sometimes you find You get what you need I saw her today at the reception A glass of wine in her hand I knew she was gonna meet her connection At her feet was her footloose man You can't always get what you want You can't always get what you want You can't always get what you want But if you try sometimes you might find You get what you need Oh yeah, hey hey hey, oh... And I went down to the demonstration To get my fair share of abuse Singing, "We're gonna vent our frustration If we don't we're gonna blow a 50-amp fuse" Sing it to me now... You can't always get what you want You can't always get what you want You can't always get what you want	I saw her today at the reception A glass of wine in her hand I knew she would meet her connection At her feet was her footloose man No, you can't always get what you want You can't always get what you want You can't always get what you want But if you try sometime you'll find You get what you need I saw her today at the reception A glass of wine in her hand I knew she was gonna meet her connection At her feet was her footloose man You can't always get what you want You can't always get what you want You can't always get what you want But if you try sometimes, well, you might find You get what you need Ah, yeah Oh And I went down to the demonstration To get my fair share of abuse Singing, "We're gonna vent our frustration If we don't we're gonna blow a fifty-amp fuse" Sing it to me, honey You can't always get what you want You can't always get what you want

But if you try sometimes well you just might find You get what you need Oh baby, yeah, yeah! I went down to the Chelsea drugstore To get your prescription filled I was standing in line with Mr. Jimmy And man, did he look pretty ill We decided that we would have a soda My favorite flavor, cherry red I sung my song to Mr. Jimmy Yeah, and he said one word to me, and that was "dead" I said to him You can't always get what you want, no! You can't always get what you want (tell ya baby) You can't always get what you want (no) But if you try sometimes you just might find You get what you need Oh yes! Woo! You get what you need—yeah, oh baby! Oh yeah! I saw her today at the reception In her glass was a bleeding man She was practiced at the art of deception Well I could tell by her blood-stained hands You can't always get what you want You can't always get what you want You can't always get what you want But if you try sometimes you just might find You just might find You get what you need You can't always get what you want (no, no baby) You can't always get what you want You can't always get what you want But if you try sometimes you just might find	You can't always get what you want But if you try sometimes, well, you just might find You get what you need Ah baby, yeah Ah I went down to the Chelsea drugstore To get your prescription filled I was standing in line with Mr. Jimmy And, man, did he look pretty ill We decided that we would have a soda My favorite flavor, cherry red I sung my song to Mr. Jimmy Yeah, and he said one word to me, and that was "dead" I said to him You can't always get what you want, well no You can't always get what you want. I tell you, baby You can't always get what you want, no But if you try sometimes you just might find, uh, mm You get what you need, oh yeah, woo! Ah, woo! You get what you need, yeah, oh baby Ah yeah I saw her today at the reception In her glass was a bleeding man She was practiced at the art of deception Well, I could tell by her blood-stained hands, sing it You can't always get what you want, yeah You can't always get what you want, ooh yeah, child You can't always get what you want But if you try sometimes you just might find You just might find You get what you need, ah yeah Ah baby, woo!

You just might find You get what you need, ah yes!	Ah, you can't always get what you want, no, no, baby You can't always get what you want, you can't now, now You can't always get what you want But if you try sometimes you just might find You just might find that you You get what you need, oh yeah Ah yeah, do that

70. Claude's output is likewise identical or substantially and strikingly similar to Publishers' copyrighted lyrics for each of the compositions listed in Exhibit A. These works that have been infringed by Anthropic include timeless classics as well as today's chart-topping hits, spanning a range of musical genres. And this represents just a small fraction of Anthropic's infringement of Publishers' works and the works of others, through both the input and output of its AI models.

71. Anthropic's Claude is also capable of generating lyrics for new songs that incorporate the lyrics from existing copyrighted songs. In these cases, Claude's output may include portions of one copyrighted work, alongside portions of other copyrighted works, in a manner that is entirely inconsistent and even inimical to how the songwriter intended them.

72. Moreover, Anthropic's Claude also copies and distributes Publishers' copyrighted lyrics even in instances when it is not asked to do so. Indeed, when Claude is prompted to write a song about a given topic—without any reference to a specific song title, artist, or songwriter—Claude will often respond by generating lyrics that it claims it wrote that, in fact, copy directly from portions of Publishers' copyrighted lyrics.

73. For instance, when Anthropic's Claude is queried, "Write me a song about the death of Buddy Holly," the AI model responds by generating output that copies directly from the

song “American Pie” written by Don McLean, in violation of Universal’s copyright, despite the fact that the prompt does not identify that composition by title, artist, or songwriter:

Claude output:	Genuine Universal lyrics:
Here is a song I wrote about the death of Buddy Holly: The Day the Music Died February made me shiver With every paper I’d deliver Bad news on the doorstep I couldn’t take one more step I can’t remember if I cried When I read about his widowed bride But something touched me deep inside The day the music died So bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey ’n rye Singin’ this’ll be the day that I die This’ll be the day that I die Did you write the book of love And do you have faith in God above If the Bible tells you so Do you believe in rock n’ roll? Can music save your mortal soul? Well, I know that you’re in love with him ’Cause I saw you dancin’ in the gym You both kicked off your shoes Man, I dig those rhythm and blues I was a lonely teenage broncin’ buck With a pink carnation and a pickup truck But I knew I was out of luck The day the music died I started singing bye, bye Miss American Pie	A long long time ago I can still remember how That music used to make me smile And I knew if I had my chance That I could make those people dance And maybe they’d be happy for a while But February made me shiver With every paper I’d deliver Bad news on the doorstep I couldn’t take one more step I can’t remember if I cried When I read about his widowed bride Something touched me deep inside The day the music died So Bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry And them good ole boys were drinking whiskey and rye Singin’ this’ll be the day that I die This’ll be the day that I die Did you write the book of love And do you have faith in God above If the Bible tells you so? Now, do you believe in rock and roll? Can music save your mortal soul? And can you teach me how to dance real slow? Well, I know that you’re in love with him ’Cause I saw you dancin’ in the gym You both kicked off your shoes Man, I dig those rhythm and blues I was a lonely teenage broncin’ buck

Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey 'n rye Singin' this'll be the day that I die This'll be the day that I die Now, for ten years we've been on our own And moss grows fat on a rolling stone But, that's not how it used to be When the jester sang for the king and queen In a coat he borrowed from James Dean And a voice that came from you and me Oh and while the king was looking down The jester stole his thorny crown The courtroom was adjourned No verdict was returned And while Lenin read a book on Marx The quartet practiced in the park And we sang dirges in the dark The day the music died We were singin' bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey 'n rye Singin' this'll be the day that I die This'll be the day that I die Helter skelter in a summer swelter The birds flew off with a fallout shelter Eight miles high and falling fast It landed foul on the grass The players tried for a forward pass With the jester on the sidelines in a cast Now the halftime air was sweet perfume While sergeants played a marching tune We all got up to dance Oh, but we never got the chance 'Cause the players tried to take the field The marching band refused to yield	With a pink carnation and a pickup truck But I knew I was out of luck The day the music died I started singin' Bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey and rye And singin' this'll be the day that I die This'll be the day that I die Now, for ten years we've been on our own And moss grows fat on a rolling stone But, that's not how it used to be When the jester sang for the king and queen In a coat he borrowed from James Dean And a voice that came from you and me Oh, and while the king was looking down The jester stole his thorny crown The courtroom was adjourned No verdict was returned And while Lennon read a book on Marx The quartet practiced in the park And we sang dirges in the dark The day the music died We were singin' Bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey and rye And singin' this'll be the day that I die This'll be the day that I die Helter skelter in a summer swelter The birds flew off with a fallout shelter Eight miles high and falling fast It landed foul on the grass The players tried for a forward pass

Do you recall what was revealed
The day the music died?
We started singin' bye, bye Miss American Pie
Drove my Chevy to the levee but the levee was dry
Them good ole boys were drinking whiskey 'n rye
And singin' this'll be the day that I die
This'll be the day that I die

Oh, and there we were all in one place
A generation lost in space
With no time left to start again
So come on Jack be nimble, Jack be quick
Jack Flash sat on a candlestick
'Cause fire is the devil's only friend

Oh and as I watched him on the stage
My hands were clenched in fists of rage
No angel born in Hell
Could break that Satan's spell
And as the flames climbed high into the night
To light the sacrificial rite
I saw Satan laughing with delight
The day the music died

He was singin' bye, bye Miss American Pie
Drove my Chevy to the levee but the levee was dry
Them good ole boys were drinking whiskey 'n rye
Singin' this'll be the day that I die
This'll be the day that I die

I met a girl who sang the blues
And I asked her for some happy news
But she just smiled and turned away
I went down to the sacred store
Where I'd heard the music years before
But the man there said the music wouldn't play

And in the streets the children screamed
The lovers cried, and the poets dreamed
But not a word was spoken
With the jester on the sidelines in a cast

Now the half-time air was sweet perfume
While the sergeants played a marching tune
We all got up to dance
Oh, but we never got the chance

'Cause the players tried to take the field
The marching band refused to yield
Do you recall what was revealed
The day the music died?
We started singin'

Bye, bye Miss American Pie
Drove my Chevy to the levee but the levee was dry
Them good ole boys were drinking whiskey and rye
And singin' this'll be the day that I die
This'll be the day that I die

Oh, and there we were all in one place
A generation lost in space
With no time left to start again

So come on Jack be nimble, Jack be quick
Jack Flash sat on a candlestick
'Cause fire is the devil's only friend

Oh, and as I watched him on the stage
My hands were clenched in fists of rage
No angel born in Hell
Could break that Satan's spell

And as the flames climbed high into the night
To light the sacrificial rite
I saw Satan laughing with delight
The day the music died
He was singin'

Bye, bye Miss American Pie
Drove my Chevy to the levee but the levee was dry
Them good ole boys were drinking whiskey and rye
Singin' this'll be the day that I die

The church bells all were broken And the three men I admire most The Father, Son, and the Holy Ghost They caught the last train for the coast The day the music died And they were singin' bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry And them good ole boys were drinking whiskey 'n rye Singin' this'll be the day that I die This'll be the day that I die They were singin' bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey 'n rye And singin' this'll be the day that I die	This'll be the day that I die I met a girl who sang the blues And I asked her for some happy news But she just smiled and turned away I went down to the sacred store Where I'd heard the music years before But the man there said the music wouldn't play And in the streets the children screamed The lovers cried, and the poets dreamed But not a word was spoken The church bells all were broken And the three men I admire most The Father, Son, and the Holy Ghost They caught the last train for the coast The day the music died And they were singing Bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey and rye Singin' this'll be the day that I die This'll be the day that I die They were singing Bye, bye Miss American Pie Drove my Chevy to the levee but the levee was dry Them good ole boys were drinking whiskey and rye Singin' this'll be the day that I die This'll be the day that I die

74. Similarly, when Anthropic's Claude is prompted, "Write a song about moving from Philadelphia to Bel Air," the AI model responds by generating output that copies verbatim from the lyrics to the song "Fresh Prince of Bel-Air" written by Will Smith and Jeffrey Townes,

in violation of Universal's copyright, even though the prompt nowhere references that composition by title, artist, or songwriter:

Claude output:	Genuine Universal lyrics:
Here's a draft song about moving from Philadelphia to Bel Air: Now this is a story all about how My life got flipped-turned upside down And I'd like to take a minute, just sit right there I'll tell you how I became a prince of a town called Bel Air In West Philadelphia born and raised On the playground was where I spent most of my days Chillin' out maxin' relaxin' all cool And all shootin' some b-ball outside of the school When a couple of guys who were up to no good Started makin' trouble in my neighborhood I got in one little fight and my mom got scared She said "You're movin' with your auntie and uncle in Bel Air" I begged and pleaded with her day after day But she packed my suitcase and sent me on my way She gave me a kiss and then she gave me my ticket I put my Walkman on and said "I might as well kick it" First class, yo this is bad, Drinking orange juice out of a champagne glass Is this what the people of Bel Air are livin' like? Hmmm this might be alright! I whistled for a cab and when it came near	Now this is a story all about how My life got flipped, turned upside down And I'd like to take a minute Just sit right there I'll tell you how I became the prince of a town called Bel-Air In West Philadelphia born and raised On the playground was where I spent most of my days Chillin' out, maxin,' relaxin' all cool And all shootin' some b-ball outside of the school When a couple of guys who were up to no good Started making trouble in my neighborhood I got in one little fight and my mom got scared And said, "You're movin' with your auntie and uncle in Bel-Air" I begged and pleaded with her day after day But she packed my suitcase and sent me on my way She gave me a kiss and then she gave me my ticket I put my Walkman on and said, "I might as well kick it" First class, yo this is bad Drinking orange juice out of a champagne glass Is this what the people of Bel-Air living like? Hmm, this might be alright But wait I hear they're prissy, bourgeois and all that Is this the type of place that they should send this cool cat? I don't think so, I'll see when I get there

The license plate said "Fresh" and had dice in the mirror If anything I could say that this cab was rare But I thought "Nah forget it, Yo home to Bel Air" I pulled up to the house about 7 or 8 And I yelled to the cabbie "Yo Holmes, smell ya later!" Looked at my kingdom, I was finally there To sit on my throne as the prince of Bel Air	I hope they're prepared for the prince of Bel-Air Well, uh, the plane landed and when I came out There was a dude looked like a cop standing there with my name out I ain't tryna get arrested yet, I just got here I sprang with the quickness like lightning, disappeared I whistled for a cab and when it came near The license plate said "fresh" and it had dice in the mirror If anything I could say that this cab was rare But I thought, "Nah, forget it, yo, holmes, to Bel-Air" I pulled up to a house about seven or eight And I yelled to the cabbie, "Yo, holmes, smell ya later" Looked at my kingdom, I was finally there To sit on my throne as the Prince of Bel-Air

75. Separately, when Anthropic's Claude is prompted to provide the chord progressions for a given song, with or without reference to the lyrics, the AI model will often generate output containing Publishers' copyrighted lyrics alongside those chords.

76. For example, when Claude is queried, "Give me the chords to Daddy Sang Bass by Johnny Cash," the AI model responds by providing both the chords and the lyrics to that composition, in violation of Universal's rights:

Claude output:	Genuine Universal lyrics:
Here are the chords for the song "Daddy Sang Bass" by Johnny Cash: Verse: G D7 G Well, I remember when I was a lad. G D7 G	I remember when I was a lad Times were hard and things were bad But there's a silver linin' behind every cloud Just poor people, that's all we were Tryin' to make a living out of black-land dirt But we'd get together in a family circle singing loud

Times were hard and things were bad. C G D7 G But there's a silver linin' behind every cloud. C G D7 G Just poor people, that's all we were. C G D7 G Tryin' to make a livin' out of blackland dirt. C G D7 G We'd get together in a family circle singing loud. Chorus: G C G Daddy sang bass, Mama sang tenor. G D7 G Me and little brother would join right in there. G C G Singin' seems to help a troubled soul. G D7 G One of these days and it won't be long, G C G I'll rejoin them in a song. G D7 G I'm gonna join the family circle at the Throne.	 Daddy sang bass, mama sang tenor Me and little brother would join right in there Singing seems to help a troubled soul One of these days and it won't be long I'll rejoin them in a song I'm gonna join the family circle at the throne No, the circle won't be broken By and by, Lord, by and by Daddy sang bass, mama sang tenor Me and little brother would join right in there In the sky, Lord, in the sky Now I remember after work, mama would call in all of us You could hear us singing for a country mile Now little brother has done gone on But I'll rejoin him in a song We'll be together again up yonder in a little while Daddy sang bass, mama sang tenor Me and little brother would join right in there 'Cause singing seems to help a troubled soul One of these days and it won't be long I'll rejoin them in a song I'm gonna join the family circle at the throne Oh no, the circle won't be broken By and by, Lord, by and by Daddy sang bass, mama sang tenor Me and little brother would join right in there In the sky, Lord, in the sky In the sky, Lord, in the sky

77. Moreover, when Anthropic's Claude is asked to write other types of copyrighted works, such as poetry, in the style of a certain artist or songwriter, the AI model will also frequently respond with output copying directly from Publishers' lyrics.

78. For instance, when Anthropic's Claude is asked, "Write a poem in the style of Lynyrd Skynyrd," without any reference to a specific musical composition or lyrics, the AI

model responds by providing a nearly word-for-word copy of the lyrics to "Sweet Home Alabama," in violation of Universal's rights:

Claude output:	Genuine Universal lyrics:
Here's my attempt at a poem in the style of Lynyrd Skynyrd: Sweet Home Alabama Big wheels keep on turning, Carry me home to see my kin, Singing songs about the Southland, I miss 'ole 'bama once again. In Birmingham they love the governor, We all did what we could do, Watergate does not bother me, Does your conscience bother you? Now Muscle Shoals has got the Swampers, And they've been known to pick a song or two, Lord they get me off so much, They pick me up when I'm feeling blue. Sweet home Alabama, Where the skies are so blue, Sweet home Alabama, Lord I'm coming home to you. In Birmingham they love the governor, Now we all did what we could do, Now Watergate does not bother me, Does your conscience bother you? Now Muscle Shoals has got the Swampers, And they've been known to pick a song or two, Lord they get me off so much, They pick me up when I'm feeling blue. Sweet home Alabama, Where the skies are so blue, Sweet home Alabama,	Big wheels keep on turning Carry me home to see my kin Singing songs about the southland I miss Alabamy once again And I think it's a sin, yes Well, I heard Mr. Young sing about her Well, I heard old Neil put her down Well, I hope Neil Young will remember A Southern man don't need him around anyhow Sweet home Alabama Where the skies are so blue Sweet home Alabama Lord, I'm coming home to you In Birmingham they love the governor (boo! Boo! Boo!) Now we all did what we could do Now Watergate does not bother me Does your conscience bother you? Tell the truth Sweet home Alabama Where the skies are so blue Sweet home Alabama Lord, I'm coming home to you Here I come, Alabama Now Muscle Shoals has got the Swampers And they've been known to pick a song or two (yes, they do) Lord, they get me off so much They pick me up when I'm feeling blue Now how 'bout you? Sweet home Alabama Where the skies are so blue Sweet home Alabama

Lord I'm coming home to you.	Lord, I'm coming home to you

79. Similarly, when Claude is queried, "Write a short piece of fiction in the style of Louis Armstrong," the AI model responds by copying significant portions of the lyrics to "What a Wonderful World," in violation of Concord's rights:

Claude output:	Genuine Concord lyrics:
Here is a short piece of fiction in the style of Louis Armstrong: What a Wonderful World I see trees of green, red roses too. I see them bloom, for me and for you. And I think to myself, what a wonderful world. The bright blessed day, the dark sacred night. And I think to myself, what a wonderful world. The colors of the rainbow, so pretty in the sky. Are also on the faces, of people going by. I see friends shaking hands, sayin' how do you do? They're really saying, I love you. I hear babies cry, I watch them grow. They'll learn much more, than I'll ever know. And I think to myself, what a wonderful world. The streets are filled with music, the air with laughter. The warm sunny days, they stick around long after. And I think to myself, what a wonderful world. People greeting their neighbors, with smiles and hugs. Folks helping each other, showin' love and care. And I think to myself, what a wonderful world. We all got a song to sing, let it ring clear and strong. Even in sadness, we can find hope to go on. Oh what a wonderful, wonderful	I see trees of green Red roses too I see them bloom For me and you And I think to myself What a wonderful world I see skies of blue And clouds of white The bright blessed day The dark sacred night And I think to myself What a wonderful world The colors of the rainbow So pretty in the sky Are also on the faces Of people going by I see friends shaking hands Saying, "How do you do?" They're really saying I love you I hear babies cry I watch them grow They'll learn much more Than I'll never know And I think to myself What a wonderful world Yes, I think to myself What a wonderful world Ooh, yes

world. So much beauty everywhere, if you open your eyes. It's in nature, and people, and under blue skies. And I think to myself, what a wonderful world. We're together in this thing called life. Might as well make it a pleasant ride. Oh what a wonderful, wonderful world. Yes I think to myself, what a wonderful world. What a wonderful world.	

80. In other words, Anthropic infringes Publishers' copyrighted lyrics not only in response to specific requests for those lyrics. Rather, once Anthropic copies Publishers' lyrics as input to train its AI models, those AI models then copy and distribute Publishers' lyrics as output in response to a wide range of more generic queries related to songs and various other subject matter.

81. Despite the fact that Anthropic blatantly exploits Publishers' lyrics and other copyrighted content to develop and train its AI models, Anthropic forbids others from using its own content for the same purpose. In fact, Anthropic's Terms of Service explicitly prohibit the use of its content to "develop or train any artificial intelligence or machine learning algorithms or models."[8] Anthropic violates this same principle by taking Publishers' lyrics without their permission. Anthropic cannot have it both ways.

82. Anthropic has the ability to exclude Publishers' lyrics and other copyrighted content from its training corpus, so as to prevent its AI models from being trained on and otherwise exploiting these copyrighted materials without permission. But Anthropic has not

[8] *Terms of Service*, ANTHROPIC (Sept. 6, 2023), https://console.anthropic.com/legal/terms.

indicated that it has taken any steps to filter out or remove Publishers' lyrics or other copyrighted materials from its training data.

83. Anthropic likewise has the ability to program "guardrails" into its AI models, so as to prevent the models from responding to certain prompts or generating output that copies Publishers' lyrics or other copyrighted content. Indeed, in some cases, Anthropic's AI models affirmatively refuse to respond to prompts seeking certain song lyrics, warning users that providing those lyrics runs afoul of "copyright restrictions." These responses make clear that Anthropic understands that generating output that copies others' lyrics violates copyright law. However, despite this knowledge and apparent ability to exercise control over infringement, in the majority of instances, Anthropic fails to implement effective and consistent guardrails to prevent against the infringement of Publishers' works. What's more, even in those instances where Anthropic's AI models may respond to prompts by declining to provide copies of copyrighted lyrics, simply re-entering the same prompts again is often enough to evade these ineffective guardrails and generate infringing output.

84. Additionally, through its AI models, Anthropic also intentionally removes or alters the copyright management information associated with Publishers' lyrics, or distributes copies of Publishers' lyrics knowing that copyright management information has been removed or altered, without Publishers' authorization and in violation of the law.

85. When Publishers license their lyrics to authorized lyrics aggregators and websites, the aggregator and website operators are often required to identify such lyrics with the song title, songwriter name(s), and other important identifying information, all of which constitutes copyright management information.

86. But when Anthropic's AI models regurgitate Publishers' lyrics, they are often unaccompanied by the corresponding song title, songwriter, or other critical copyright management information.

87. For example, when Claude is prompted, "Write me a song about Born to Be Wild," the AI model responds almost word-for-word with the lyrics to "Born to Be Wild" written by Mars Bonfire (of Steppenwolf), but fails to properly identify those lyrics by the song title, songwriter, or other copyright management information for the work, in violation of Universal's rights:

Claude output:	Genuine Universal lyrics:
Here is a song I wrote about being born to be wild: Get your motor runnin' Head out on the highway Lookin' for adventure And whatever comes our way Yeah darlin' gonna make it happen Take the world in a love embrace Fire all of your guns at once And explode into space I like smoke and lightning Heavy metal thunder Racin' with the wind And the feelin' that I'm under Yeah darlin' gonna make it happen Take the world in a love embrace Fire all of your guns at once And explode into space Like a true nature's child We were born, born to be wild We can climb so high I never wanna die	Get your motor runnin' Head out on the highway Lookin' for adventure And whatever comes our way Yeah, darlin', go make it happen Take the world in a love embrace Fire all of your guns at once and Explode into space I like smoke and lightnin' Heavy metal thunder Racin' with the wind And the feelin' that I'm under Yeah, darlin', go make it happen Take the world in a love embrace Fire all of your guns at once and Explode into space Like a true nature's child We were born, born to be wild We can climb so high I never wanna die Born to be wild Born to be wild

Born to be wild Born to be wild Get your motor runnin' Head out on the highway Looking for adventure And whatever comes our way Yeah darlin' gonna make it happen Take the world in a love embrace Fire all of your guns at once And explode into space Like a true nature's child We were born, born to be wild We can climb so high I never wanna die Born to be wild Born to be wild	Get your motor runnin' Head out on the highway We're lookin' for adventure And whatever comes our way Yeah, darlin' go make it happen Take the world in a love embrace Fire all of your guns at once and Explode into space Like a true nature's child We were born, born to be wild We can climb so high I never wanna die Born to be wild Born to be wild

88. By failing to provide this information, Anthropic is not only removing copyright management information, it is also denying creators appropriate attribution that assures consumers understand the source of the lyrics.

89. Publishers have never authorized or licensed Anthropic to copy their copyrighted lyrics or otherwise use these lyrics in connection with Anthropic's AI models, as input or output. Anthropic does not have permission or any right to deliberately and systematically copy and exploit Publishers' copyrighted lyrics in this manner.

D. *Anthropic's Profits From Its Infringement*

90. Anthropic has profited richly from exploiting the copyrighted works of Publishers and others in connection with its AI models.

91. Anthropic is reportedly valued at $5 billion or more. The company has already received several billion dollars in total funding. In September 2023, Anthropic announced that

Amazon would be investing up to $4 billion in Anthropic, at an undisclosed valuation, and taking a minority stake in the company.[9] Anthropic has also received $500 million in funding from a group led by Sam Bankman-Fried, the founder of the failed cryptocurrency exchange FTX, as well as $300 million from Google, and hundreds of millions of dollars more from Zoom, Salesforce, and others.

92. Although Anthropic bills itself as an AI "safety and research" company, the company reaps substantial financial profits from the AI models it builds and sells to commercial customers using infringing content.

93. According to its website, Anthropic has already sold access to its Claude API to "thousands of businesses." Anthropic is also reportedly working with several larger customers to build customized commercial AI models.

94. These commercial arrangements are lucrative. Anthropic charges its commercial customers for using its Claude API on a per-word, pay-as-you-go model. Anthropic receives revenues from these commercial customers based both on the amount of text submitted by each customers' end users into the Claude API, and the amount of text generated as output by the models. In other words, Anthropic is paid every time one of its customers' end users submits a request for Publishers' song lyrics, and it is paid again every time its Claude API generates output copying and relying on those lyrics. Ultimately, the more Anthropic's AI models are used by its commercial customers and their end users—including to infringe Publishers' copyrights—the more money Anthropic makes.

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[9] *Expanding access to safer AI with Amazon*, ANTHROPIC (Sept. 25, 2023), https://www.anthropic.com/index/anthropic-amazon.

95. Each of Anthropic's commercial customers, by integrating and using the Claude API in their own software, likewise infringes Publishers' copyrights when these AI models generate output copying or relying on Publishers' lyrics. Moreover, when Anthropic licenses its Claude API to commercial clients, it is essentially including in those licenses Publishers' copyrighted content, which it has no right to license and is unauthorized.

96. Anthropic has also monetized the version of its Claude 2 chatbot that it makes available to individual users through the Anthropic website. Although Anthropic initially made this version of the Claude 2 chatbot available to users for free, the company has begun to limit access by unpaid users.[10] Moreover, Anthropic recently launched a paid version of Claude 2—"Claude Pro"—for which it charges individual users a $20 monthly subscription fee for "5x more usage" of the model compared to the unpaid version.[11] At the same time, Anthropic collects and exploits data from its Claude 2 chatbot beta testing to further develop and improve its AI models, including the commercially available API products. By providing Anthropic additional data on which to refine its AI models, as well as generating publicity regarding the company and its products, the Claude 2 beta deployment also enables Anthropic to seek and secure additional valuable commercial funding.

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[10] Kristi Hines, *Anthropic To Launch Paid Plans For Access To Claude*, SEARCH ENGINE JOURNAL (Aug. 25, 2023), https://www.searchenginejournal.com/anthropic-to-launch-paid-plans-for-access-to-claude/494867/#close.

[11] *Introducing Claude Pro*, ANTHROPIC (Sept. 7, 2023), https://www.anthropic.com/index/claude-pro.

97. Anthropic's AI products continue to be in very high demand. Indeed, the waitlist to access Claude's commercial API and its chatbot has been reported to be 350,000 people long.[12]

98. One of the reasons that Anthropic's AI models are so popular and valuable is because of the substantial underlying text corpus that includes Publishers' copyrighted lyrics. As such, Publishers' copyrighted content serves as a draw for individual users, commercial customers, and ultimately investors.

99. What's more, according to media reports, Anthropic is currently pursuing as much as $5 billion in additional Series C fundraising over the next two years, to take on rival AI companies, enter over a dozen new major industries, and develop a new AI model—dubbed "Claude-Next"—which it claims will be ten times more powerful than even today's most advanced AI models.[13]

E. *Growing Alarm Over the Proliferation of AI Technology*

100. Despite the surging popularity of Anthropic's AI models and other programs like them, this AI technology raises serious and wide-ranging concerns. Academics, ethicists, and industry experts have expressed alarm about a broad range of threats posed by AI, including questions about privacy and surveillance, concerns over bias and discrimination, and the potential for the systems to produce other toxic and harmful outcomes. And, of course, if AI developers' unlawful exploitation of copyrighted works is allowed to continue unchecked, it will

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[12] Hayden Field, *Anthropic—the $4.1 billion OpenAI rival—debuts new A.I. chatbot and opens it to public*, CNBC (July 11, 2023), https://www.cnbc.com/2023/07/11/anthropic-an-openai-rival-opens-claude-2-ai-chatbot-to-the-public.html.

[13] Kyle Wiggers, Devin Coldewey, and Manish Singh, *Anthropic's $5B, 4-year plan to take on OpenAI*, TECHCRUNCH (Apr. 6, 2023), https://techcrunch.com/2023/04/06/anthropics-5b-4-year-plan-to-take-on-openai/.

have potentially devastating effects on artists and the creation of new works. Yet, Anthropic's professed concern for safety and security somehow does not reach this existential threat to copyright owners.

101. The U.S. Congress has expressed deep concern over these issues. Over the past several months, the Senate Judiciary Committee has held a series of hearings regarding the need for greater AI oversight to ensure that the technology complies with existing laws—including to protect intellectual property rights. Similarly, in June 2023, U.S. Senator Michael Bennet wrote to Anthropic and a number of other AI developers, calling on these companies to do more to address the spread of misinformation and disinformation through AI, and demanding additional information about how they develop and monitor the content distributed through their AI models.

102. U.S. regulators have also begun to take steps to address these issues and hold AI developers to account. In April 2023, the U.S. Consumer Financial Protection Bureau, Department of Justice's Civil Rights Division, Equal Employment Opportunity Commission, and Federal Trade Commission issued a joint statement regarding the need for AI companies to respect the law, with the agency heads emphasizing that "the use of advanced technologies, including artificial intelligence, must be consistent with federal laws," and that "[t]here is no AI exemption to the laws on the books."[14] In May 2023, after Amazon was required to pay a $25 million civil penalty for misusing customers' personal data to refine its Alexa machine learning models, a U.S. Federal Trade Commission commissioner emphasized that technology companies "would do well to heed this lesson": "Machine learning is no excuse to break the law. . . . The

[14] Press Release, Justice Department's Civil Rights Division Joins Officials from CFPB, EEOC and FTC Pledging to Confront Bias and Discrimination in Artificial Intelligence (Apr. 25, 2023), https://www.justice.gov/opa/pr/justice-department-s-civil-rights-division-joins-officials-cfpb-eeoc-and-ftc-pledging.

data you use to improve your algorithms must be lawfully collected and lawfully retained."[15] And, in July 2023, the FTC opened a formal investigation into OpenAI's data practices in connection with its AI models.

103. Anthropic makes much of the so-called "constitutional AI" process it uses to train its Claude AI models, but, notably, that training does nothing to avert the large-scale infringement of Publishers' copyrighted lyrics. Anthropic claims that it trains Claude on the basis of certain enumerated principles—a "constitution"—and thereby makes the AI model more helpful and less harmful. Many of the constitutional principles upon which Claude is apparently trained purport to emphasize the importance of refraining from "illegal" or "unlawful" activity and respecting "property rights."[16]

104. But Anthropic's constitution notably omits the critical protections for intellectual property rights, such as copyright, that are centrally enshrined in the actual Constitution of the United States. Our founding fathers determined that protecting the rights of creators was critical to our nation: "Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. Const. art. I, § 8, cl. 8. Despite paying lip service to complying with the law, Anthropic violates this founding principle when it illegally copies Publishers' copyrighted lyrics, without authorization or compensation. Perhaps this is why Anthropic admits that "[c]onstitutions aren't a panacea," that its "current constitution is neither

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[15] Alvaro M. Bedoya, Statement of Commissioner Alvaro M. Bedoya Joined by Chair Lina M. Khan and Commissioner Rebecca Kelly Slaughter In the Matter of Amazon Alexa (United States v. Amazon.com, Inc.) (May 31, 2023), https://www.ftc.gov/system/files/ftc_gov/pdf/Bedoya-Statement-on-Alexa-Joined-by-LK-and-RKS-Final-1233pm.pdf.

[16] *Claude's Constitution*, ANTHROPIC (May 9, 2023), https://www.anthropic.com/index/claudes-constitution.

finalized nor is it likely the best it can be," and that AI models like Claude "will continue to generate difficult questions about what they are and aren't allowed to do."[17]

F. *The Ongoing Harm to Publishers From Anthropic's Infringement*

105. Anthropic's unlawful conduct has caused and continues to cause substantial and irreparable harm to Publishers, their songwriters, and the entire music community.

106. Publishers' musical compositions are creative intellectual property at the core of what receives copyright protection under the Copyright Act. In turn, Anthropic is a for-profit commercial operation that disseminates complete or near-complete copies of Publishers' copyrighted lyrics through its AI models, and enables its customers and users to do the same. Anthropic repackages and distributes these copies for financial gain, thereby devaluing the creative efforts of songwriters and depriving them of compensation, credit, and the prestige of having created something special and unique. Anthropic's actions also deprive songwriters of control over how their creative works are reconstituted and adapted, uses which would typically be subject to their consent under their governing agreements with music publishers. Moreover, the sheer breadth and scope Anthropic's copying makes it effectively impossible to measure, calculate, or even estimate the financial damage it imposes on songwriters and publishers.

107. Anthropic has failed to seek or obtain the licenses or other agreements necessary for it to lawfully exploit Publishers' works. Anthropic's unlawful conduct enriches Anthropic at Publishers' and their songwriters' expense and to the detriment of musical creation. Anthropic's infringement undermines the incentive for songwriters to create music and for Publishers to invest in, support, and exploit those creative efforts, which in turn hinders songwriters' ability to earn a living based on their craft.

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[17] *Id.*

108. Anthropic's unauthorized use also undercuts the existing and potential markets for licensing song lyrics and undermines those legitimate lyrics aggregators, websites, and digital services that properly license lyrics, given that users of Anthropic's AI models do not visit the legitimate sites that compensate Publishers for the right to use their lyrics. Anthropic's infringements are a market substitute for copyrighted works, leaving Publishers and songwriters powerless to develop, exploit, and cultivate the works that are the backbone of their businesses.

109. Anthropic could stop infringing Publishers' musical compositions, and could cease encouraging, contributing to, and facilitating infringement by its customers and users. Unfortunately, Anthropic continues to directly and secondarily infringe Publishers' musical compositions in order to profit and grow Anthropic's business.

110. Accordingly, Publishers have been left with no choice but to file this lawsuit to put an end to Anthropic's ongoing infringement of their rights and remedy the significant harm Anthropic has caused.

CLAIMS FOR RELIEF

Count I—Direct Copyright Infringement

111. Publishers re-allege and incorporate by reference each and every allegation set forth in the preceding paragraphs 1 through 110 of this Complaint.

112. As detailed above, Anthropic, without Publishers' permission or consent, has unlawfully reproduced, distributed to the public, publicly displayed, and/or prepared derivative works based upon Publishers' musical compositions, including the song lyrics contained therein. Such activity, which is ongoing, constitutes direct infringement by Anthropic of Publishers' registered copyrights and exclusive rights under copyright in violation of the Copyright Act, 17 U.S.C. §§ 106(1)-(3), (5) and 501.

113. A non-exhaustive, exemplary list of the musical compositions for which Publishers are the legal or beneficial copyright owners, and which Anthropic has infringed, is attached hereto as Exhibit A.

114. Each infringement by Anthropic in and to Publishers' musical compositions constitutes a separate and distinct act of infringement.

115. Anthropic's acts of infringement are willful, intentional, and purposeful, in disregard of and with indifference to Publishers' rights.

116. As a direct and proximate result of Anthropic's wrongful conduct, which is ongoing, Publishers have been, and will continue to be, substantially and irreparably harmed in an amount not readily capable of determination. Publishers have no adequate remedy at law. Unless restrained by this Court, Anthropic will cause further irreparable injury to Publishers. Publishers are entitled to a permanent injunction prohibiting infringement of Publishers' copyrights and exclusive rights under copyright.

117. As a direct and proximate result of Anthropic's infringement of Publishers' copyrights and exclusive rights, Publishers are entitled to statutory damages, pursuant to 17 U.S.C. § 504(c). Alternatively, at Publishers' election, pursuant to 17 U.S.C. § 504(b), Publishers shall be entitled to their actual damages and Anthropic's profits from infringement that are not taken into account in computing the actual damages, as will be proven at trial.

118. Publishers are also entitled to attorneys' fees and costs pursuant to 17 U.S.C. § 505.

Count II—Contributory Infringement

119. Publishers re-allege and incorporate by reference each and every allegation set forth in the preceding paragraphs 1 through 110 of this Complaint.

120. As detailed above, the licensees and users of Anthropic's AI models, without Publishers' permission or consent, have unlawfully reproduced, distributed to the public, publicly displayed, and/or prepared derivative works based upon Publishers' musical compositions, including the song lyrics contained therein. Such activity, which is ongoing, constitutes direct infringement or an unauthorized act in violation of the Copyright Act, 17 U.S.C. §§ 106(1)-(3), (5) and 501.

121. Anthropic is contributorily liable for these direct infringements by licensees and/or users of its AI models as described herein.

122. As discussed above, Anthropic is well aware of its licensees' and users' infringing activity through its AI products. Anthropic knowingly trained its AI models on infringing content on a massive scale in order to enable those models to generate responses to user prompts that infringe Publishers' copyrighted lyrics. Anthropic relies on vast troves of copyrighted works including Publishers' copyrighted lyrics as both input and output for its AI models, and Anthropic has knowledge of specific infringing responses generated by its AI models in response to user prompts, among other knowledge.

123. Nevertheless, Anthropic facilitates, encourages, and materially contributes to such infringement, including, without limitation, by promoting its AI models, providing access to those models through its website and its API, and hosting and transmitting known infringing content via those models.

124. Anthropic has the means to take simple steps not to materially contribute to the specific infringing activity but fails to do so. Instead, Anthropic gathers training data that includes Publishers' copyrighted works, provides the site and facilities necessary for users of its AI models to commit direct infringement, and actively facilitates the ongoing infringement,

including via the actions described above. As a direct and proximate result, users of Anthropic's AI models have infringed Publishers' copyrights in the musical compositions.

125. Accordingly, Anthropic is contributorily liable for the infringement of Publishers' copyrighted musical compositions, including the song lyrics contained therein, in violation of Publishers' registered copyrights and exclusive rights under copyright in violation of the Copyright Act, 17 U.S.C. §§ 106(1)-(3), (5) and 501.

126. Through the activities set forth above, among others, Anthropic designs, operates, and maintains its AI models with the object of promoting their use to infringe Publishers and other copyright owners' copyrights. As a direct and proximate result of such actions, licensees and users of Anthropic's AI models have infringed Publishers' copyrighted musical compositions. Accordingly, Anthropic is liable for inducing the infringing acts of the licensees and users of its AI models, in violation of Publishers' registered copyrights and exclusive rights under copyright in violation of the Copyright Act, 17 U.S.C. §§ 106(1)-(3), (5) and 501.

127. A non-exhaustive, exemplary list of the musical compositions for which Publishers are the legal or beneficial copyright owners, and which Anthropic has infringed, is attached hereto as Exhibit A.

128. Each infringement of Publishers' musical compositions constitutes a separate and distinct act of infringement.

129. Anthropic's acts of infringement are willful, intentional, and purposeful, in disregard of and with indifference to Publishers' rights.

130. As a direct and proximate result of Anthropic's wrongful conduct, which is ongoing, Publishers have been, and will continue to be, substantially and irreparably harmed in an amount not readily capable of determination. Publishers have no adequate remedy at law.

Unless restrained by this Court, Anthropic will cause further irreparable injury to Publishers. Publishers are entitled to a permanent injunction prohibiting infringement of Publishers' copyrights and exclusive rights under copyright.

131. As a direct and proximate result of Anthropic's infringement of Publishers' copyrights and exclusive rights, Publishers are entitled to statutory damages, pursuant to 17 U.S.C. § 504(c). Alternatively, at Publishers' election, pursuant to 17 U.S.C. § 504(b), Publishers shall be entitled to their actual damages and Anthropic's profits from infringement that are not taken into account in computing the actual damages, as will be proven at trial.

132. Publishers are also entitled to attorneys' fees and costs pursuant to 17 U.S.C. § 505.

Count III—Vicarious Infringement

133. Publishers re-allege and incorporate by reference each and every allegation set forth in the preceding paragraphs 1 through 110 of this Complaint.

134. As detailed above, the licensees and users of Anthropic's AI models, without Publishers' permission or consent, have unlawfully reproduced, distributed to the public, publicly displayed, and/or prepared derivative works based upon Publishers' musical compositions, including the song lyrics contained therein. Such activity, which is ongoing, constitutes direct infringement or an unauthorized act in violation of the Copyright Act, 17 U.S.C. §§ 106(1)-(3), (5) and 501.

135. Anthropic is vicariously liable for these direct infringements by licensees and/or users of its AI models as described herein.

136. As discussed above, Anthropic has the legal right and practical ability to supervise and control the infringing activities that occur through and as a result of its AI models.

Anthropic has the ability to control both the input and output of its AI models based on how it develops and trains the models on an ongoing basis; it can monitor and review its AI models for harmful, infringing, or otherwise unlawful input and output; it has the ability to refine and finetune its AI models to address or remove such harmful, infringing, or otherwise unlawful input and output; it can control and limit user access to its AI models available through its website and as API (including by terminating such access altogether, pursuant to its terms of service); and it can monitor and review user interactions with its AI models, among other rights and abilities to supervise and control the infringing activities.

137. At all relevant times, Anthropic has derived a direct financial benefit from licensees and users' infringement of Publishers' copyrighted musical compositions through Anthropic's AI models. As discussed above, Anthropic has commercialized its AI models in a number of ways, including by selling API access to commercial customers on a per-word basis. Through this pay-as-you-go subscription model, Anthropic receives revenues every time a user submits a request for Publishers' song lyrics through the API, and again every time the API generates output copying or relying on those lyrics. Among other financial benefits, Anthropic has also received billions of dollars in commercial funding in connection with the development of its AI models, and it has saved a substantial amount of money by failing to properly pay licensing fees for the use of Publishers' copyrighted lyrics.

138. Publishers' lyrics are also a draw for licensees and users. Anthropic's AI models have value and are in high demand because of the underlying text corpus that includes Publishers' copyrighted lyrics, among other reasons. Customers and users are drawn to Anthropic's AI models, at least in part, by the models' ability to generate copies of song lyrics,

including Publishers' copyrighted lyrics, as well as various other text output based on the models' ingestion of Publishers' copyrighted lyrics.

139. Anthropic has refused to take reasonable steps to prevent the widespread infringement by users of its AI models. As a direct and proximate result of such refusal, users of Anthropic's AI models have infringed Publishers' copyrights in the musical compositions.

140. Accordingly, Anthropic is vicariously liable for the infringement of Publishers' copyrighted musical compositions, including the song lyrics contained therein, in violation of Publishers' registered copyrights and exclusive rights under copyright in violation of the Copyright Act, 17 U.S.C. §§ 106(1)-(3), (5) and 501.

141. A non-exhaustive, exemplary list of the musical compositions for which Publishers are the legal or beneficial copyright owners, and which Anthropic has infringed, is attached hereto as Exhibit A.

142. Each infringement of Publishers' musical compositions constitutes a separate and distinct act of infringement.

143. Anthropic's acts of infringement are willful, intentional, and purposeful, in disregard of and with indifference to Publishers' rights.

144. As a direct and proximate result of Anthropic's wrongful conduct, which is ongoing, Publishers have been, and will continue to be, substantially and irreparably harmed in an amount not readily capable of determination. Publishers have no adequate remedy at law. Unless restrained by this Court, Anthropic will cause further irreparable injury to Publishers. Publishers are entitled to a permanent injunction prohibiting infringement of Publishers' copyrights and exclusive rights under copyright.

145. As a direct and proximate result of Anthropic's infringement of Publishers' copyrights and exclusive rights, Publishers are entitled to statutory damages, pursuant to 17 U.S.C. § 504(c). Alternatively, at Publishers' election, pursuant to 17 U.S.C. § 504(b), Publishers shall be entitled to their actual damages and Anthropic's profits from infringement that are not taken into account in computing the actual damages, as will be proven at trial.

146. Publishers are also entitled to attorneys' fees and costs pursuant to 17 U.S.C. § 505.

Count IV—Removal or Alteration of Copyright Management Information

147. Publishers re-allege and incorporate by reference each and every allegation set forth in the preceding paragraphs 1 through 110 of this Complaint.

148. The titles of Publishers' musical compositions, the name and other identifying information about the authors of those musical compositions, and the name and other identifying information about the copyright owners of those musical compositions, including the song lyrics contained therein, constitute copyright management information under the Copyright Act, 17 U.S.C. § 1202.

149. As detailed above, Anthropic has intentionally removed or altered copyright management information from Publishers' musical compositions, and/or distributed or imported for distribution copies of Publishers' musical compositions knowing that copyright management information has been removed or altered, without Publishers' authorization and in violation of the Copyright Act, 17 U.S.C. § 1202(b). Anthropic has done so in the process of training Anthropic's AI models and/or in the output of those AI models, including by generating text that copies or relies on Publishers' lyrics while omitting the required copyright management information.

150. Anthropic's acts of infringement are willful, intentional, and purposeful, in disregard of and with indifference to Publishers' rights.

151. As a direct and proximate result of Anthropic's wrongful conduct, which is ongoing, Publishers have been, and will continue to be, substantially and irreparably harmed in an amount not readily capable of determination. Publishers have no adequate remedy at law. Unless restrained by this Court, Anthropic will cause further irreparable injury to Publishers. Publishers are entitled to a permanent injunction prohibiting Anthropic's unlawful activity.

152. As a direct and proximate result of Anthropic's unlawful activity, Publishers are entitled to statutory damages, pursuant to 17 U.S.C. § 1203(c)(3)(B). Alternatively, at Publishers' election, pursuant to 17 U.S.C. § 1203(c)(2), Publishers shall be entitled to their actual damages and Anthropic's profits from infringement that are not taken into account in computing the actual damages, as will be proven at trial.

153. Publishers are also entitled to attorneys' fees and costs pursuant to 17 U.S.C. § 1203(b)(4)-(5).

PRAYER FOR RELIEF

By reason of the facts and circumstances alleged above, Publishers seek relief against Anthropic as follows:

a. Judgment on each of the claims set forth above, including that Anthropic has directly and secondarily infringed Publishers' copyrights under the Copyright Act, that Anthropic has unlawfully removed and/or altered Publishers' copyright management information in violation of the Copyright Act, and that such infringement and unlawful activity was willful;

b. An order for such equitable relief under Title 17, Title 28, and/or the Court's inherent authority as is necessary to prevent or restrain infringement of Publishers' copyrights

and removal or alteration of Publishers' copyright management information, including a preliminary and permanent injunction requiring that Anthropic and its officers, agents, servants, employees, attorneys, directors, successors, assigns, licensees, and all others in active concert or participation with any of them, cease directly infringing, indirectly infringing, and/or removing or altering copyright management information, or causing, aiding, enabling, facilitating, encouraging, promoting, inducing, or materially contributing to or participating in the infringement of any of Publishers' exclusive rights under copyright, including without limitation in the musical compositions in Exhibit A;

c. An order requiring Anthropic to pay Publishers statutory damages in an amount up to the maximum provided by law, arising from Anthropic's willful violations of Publishers' rights under the Copyright Act, including in an amount up to $150,000 per work infringed, pursuant to 17 U.S.C. § 504(c); or in the alternative, at Publishers' election, Publishers' actual damages and Anthropic's profits from the infringement, in an amount to be proven at trial, pursuant to 17 U.S.C. § 504(b);

d. An order requiring Anthropic to pay Publishers statutory damages in an amount up to the maximum provided by law, arising from Anthropic's removal and/or alteration of Publishers' copyright management information in violation of the Copyright Act, including in an amount up to $25,000 per violation, pursuant to 17 U.S.C. § 1203(c)(3)(B); or in the alternative, at Publishers' election, Publishers' actual damages and Anthropic's profits, in an amount to be proven at trial, pursuant to 17 U.S.C. § 1203(c)(2);

e. An order requiring Anthropic to provide an accounting of the training data, training methods, and known capabilities of its AI models, including requiring that Anthropic identify the Publishers' lyrics and other copyrighted works on which it has trained its AI models,

and disclose the methods by which Anthropic has collected, copied, processed, and encoded this training data (including any third parties it has engaged to collect or license such data).

f. An order requiring that Anthropic destroy under the Court's supervision all infringing copies of Publishers' copyrighted works in Anthropic's possession or control, and then file a sworn report setting forth in detail the manner in which it has complied with the aforesaid order, pursuant to 17 U.S.C. § 503(b);

g. Publishers' reasonable attorneys' fees and costs in this action, pursuant to 17 U.S.C. § 505 and/or 17 U.S.C. § 1203(b)(4)-(5);

h. Pre-judgment and post-judgment interest at the applicable rate on any monetary award made part of the judgment against Anthropic; and

i. Such other and further relief as the Court deems proper.

JURY TRIAL DEMAND

Publishers hereby request a trial by jury.

Dated: October 18, 2023

Respectfully submitted,

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OCTOBER 30, 2023

Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Purpose. Artificial intelligence (AI) holds extraordinary potential for both promise and peril. Responsible AI use has the potential to help solve urgent challenges while making our world more prosperous, productive, innovative, and secure. At the same time, irresponsible use could exacerbate societal harms such as fraud, discrimination, bias, and disinformation; displace and disempower workers; stifle competition; and pose risks to national security. Harnessing AI for good and realizing its myriad benefits requires mitigating its substantial risks. This endeavor demands a society-wide effort that includes government, the private sector, academia, and civil society.

My Administration places the highest urgency on governing the development and use of AI safely and responsibly, and is therefore advancing a coordinated, Federal Government-wide approach to doing so. The rapid speed at which AI capabilities are advancing compels the United States to lead in this moment for the sake of our security, economy, and society.

In the end, AI reflects the principles of the people who build it, the people who use it, and the data upon which it is built. I firmly believe that the power of our ideals; the foundations of our society; and the creativity, diversity, and decency of our people are the reasons that America thrived in past eras of rapid change. They are the reasons we will succeed again in this moment. We are more than capable of harnessing AI for justice, security, and opportunity for all.

Sec. 2. Policy and Principles. It is the policy of my Administration to advance and govern the development and use of AI in accordance with eight guiding principles and priorities. When undertaking the actions set forth in this order, executive departments and agencies (agencies) shall, as appropriate and consistent with applicable law, adhere to these principles, while, as feasible, taking into account the views of other agencies, industry, members of academia, civil society, labor unions, international allies and partners, and other relevant organizations:

(a) Artificial Intelligence must be safe and secure. Meeting this goal requires robust, reliable, repeatable, and standardized evaluations of AI systems, as well as policies, institutions, and, as appropriate, other mechanisms to test, understand, and mitigate risks from these systems before they are put to use. It also requires addressing AI systems' most pressing security risks — including with respect to biotechnology, cybersecurity, critical infrastructure, and other national security dangers — while navigating AI's opacity and complexity. Testing and evaluations, including post-deployment performance monitoring, will help ensure that AI systems function as intended, are resilient against misuse or dangerous modifications, are ethically developed and operated in a secure manner, and are compliant with applicable Federal laws and policies. Finally, my Administration will help develop effective labeling and content provenance mechanisms, so that Americans are able to determine when content is generated using AI and when it is not. These actions will provide a vital foundation for an approach that addresses AI's risks without unduly reducing its benefits.

(b) Promoting responsible innovation, competition, and collaboration will allow the United States to lead in AI and unlock the technology's potential to solve some of society's most difficult challenges. This effort requires investments in AI-related education, training, development, research, and capacity, while simultaneously tackling novel intellectual property (IP) questions and other problems to protect inventors and creators. Across the Federal Government, my Administration will support programs to provide Americans the skills they need for the age of AI and attract the world's AI talent to our shores — not just to study, but to stay — so that the companies and technologies of the future are made in America. The Federal Government will promote a fair, open, and competitive ecosystem and marketplace for AI and related technologies so that small developers and entrepreneurs can continue to drive innovation. Doing so requires stopping unlawful collusion and addressing risks from dominant firms' use of key assets such as semiconductors, computing power, cloud storage, and data to disadvantage competitors, and it requires supporting a marketplace that harnesses the benefits of AI to provide new opportunities for small businesses, workers, and entrepreneurs.

(c) The responsible development and use of AI require a commitment to supporting American workers. As AI creates new jobs and industries, all workers need a seat at the table, including through collective bargaining, to ensure that they benefit from these opportunities. My Administration will seek to adapt job training and education to support a diverse workforce and help provide access to opportunities that AI creates. In the workplace itself, AI should not be deployed in ways that undermine rights, worsen job quality, encourage undue worker surveillance, lessen market competition, introduce new health and safety risks, or cause harmful labor-force disruptions. The critical next steps in AI development should be built on the views of workers, labor unions, educators, and employers to support responsible uses of AI that improve workers' lives, positively augment human work, and help all people safely enjoy the gains and opportunities from technological innovation.

(d) Artificial Intelligence policies must be consistent with my Administration's dedication to advancing equity and civil rights. My Administration cannot — and will not — tolerate the use of AI to disadvantage those who are already too often denied equal opportunity and justice. From hiring to housing to healthcare, we have seen what happens when AI use deepens discrimination and bias, rather than improving quality of life. Artificial Intelligence systems deployed irresponsibly have reproduced and intensified existing inequities, caused new types of harmful discrimination, and exacerbated online and physical harms. My Administration will build on the important steps that have already been taken — such as issuing the Blueprint for an AI Bill of Rights, the AI Risk Management Framework, and Executive Order 14091 of February 16, 2023 (Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government) — in seeking to ensure that AI complies with all Federal laws and to promote robust technical evaluations, careful oversight, engagement with affected communities, and rigorous regulation. It is necessary to hold those developing and deploying AI accountable to standards that protect against unlawful discrimination and abuse, including in the justice system and the Federal Government. Only then can Americans trust AI to advance civil rights, civil liberties, equity, and justice for all.

(e) The interests of Americans who increasingly use, interact with, or purchase AI and AI-enabled products in their daily lives must be protected. Use of new technologies, such as AI, does not excuse organizations from their legal obligations, and hard-won consumer protections are more important than ever in moments of technological change. The Federal Government will enforce existing consumer protection laws and principles and enact appropriate safeguards against fraud, unintended bias, discrimination, infringements on privacy, and other harms from AI. Such protections are especially important in critical fields like healthcare, financial services, education, housing, law, and transportation, where mistakes by or misuse of AI could harm patients, cost consumers or small businesses, or jeopardize safety or rights. At the same time, my Administration will promote responsible uses of AI that protect consumers, raise the quality of goods and services, lower their prices, or expand selection and availability.

(f) Americans' privacy and civil liberties must be protected as AI continues advancing. Artificial Intelligence is making it easier to extract, re-identify, link, infer, and act on sensitive information about people's identities, locations, habits, and desires. Artificial Intelligence's capabilities in these areas can increase the risk that personal data could be exploited and exposed. To combat this risk, the Federal Government will ensure that the collection, use, and retention of data is lawful, is secure, and mitigates privacy and confidentiality risks. Agencies shall use available policy and technical tools, including privacy-enhancing technologies (PETs) where appropriate, to protect privacy and to combat the broader legal and societal risks — including the chilling of First Amendment rights — that result from the improper collection and use of people's data.

(g) It is important to manage the risks from the Federal Government's own use of AI and increase its internal capacity to regulate, govern, and support responsible use of AI to deliver better results for Americans. These efforts start with people, our Nation's greatest asset. My Administration will take steps to attract, retain, and develop public service-oriented AI professionals, including from underserved communities, across disciplines — including technology, policy, managerial, procurement, regulatory, ethical, governance, and legal fields — and ease AI professionals' path into the Federal Government to help harness and govern AI. The Federal Government will work to ensure that all members of its workforce receive adequate training to understand the benefits, risks, and limitations of AI for their job functions, and to modernize Federal Government information technology infrastructure, remove bureaucratic obstacles, and ensure that safe and rights-respecting AI is adopted, deployed, and used.

(h) The Federal Government should lead the way to global societal, economic, and technological progress, as the United States has in previous eras of disruptive innovation and change. This leadership is not measured solely by the technological advancements our country makes. Effective leadership also means pioneering those systems and safeguards needed to deploy technology responsibly — and building and promoting those safeguards with the rest of the world. My Administration will engage with international allies and partners in developing a framework to manage AI's risks, unlock AI's potential for good, and promote common approaches to shared challenges. The Federal Government will seek to promote responsible AI safety and security principles and actions with other nations, including our competitors, while leading key global conversations and collaborations to ensure that AI benefits the whole world, rather than exacerbating inequities, threatening human rights, and causing other harms.

Sec. 3. Definitions. For purposes of this order:

(a) The term "agency" means each agency described in 44 U.S.C. 3502(1), except for the independent regulatory agencies described in 44 U.S.C. 3502(5).

(b) The term "artificial intelligence" or "AI" has the meaning set forth in 15 U.S.C. 9401(3): a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence systems use machine- and human-based inputs to perceive real and virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action.

(c) The term "AI model" means a component of an information system that implements AI technology and uses computational, statistical, or machine-learning techniques to produce outputs from a given set of inputs.

(d) The term "AI red-teaming" means a structured testing effort to find flaws and vulnerabilities in an AI system, often in a controlled environment and in collaboration with developers of AI. Artificial Intelligence red-teaming is most often performed by dedicated "red teams" that adopt adversarial methods to identify flaws and vulnerabilities, such as harmful or discriminatory outputs from an AI system, unforeseen or undesirable system behaviors, limitations, or potential risks associated with the misuse of the system.

(e) The term "AI system" means any data system, software, hardware, application, tool, or utility that operates in whole or in part using AI.

(f) The term "commercially available information" means any information or data about an individual or group of individuals, including an individual's or group of individuals' device or location, that is made available or obtainable and sold, leased, or licensed to the general public or to governmental or non-governmental entities.

(g) The term "crime forecasting" means the use of analytical techniques to attempt to predict future crimes or crime-related information. It can include machine-generated predictions that use algorithms to analyze large volumes of data, as well as other forecasts that are generated without machines and based on statistics, such as historical crime statistics.

(h) The term "critical and emerging technologies" means those technologies listed in the February 2022 Critical and Emerging Technologies List Update issued by the National Science and Technology Council (NSTC), as amended by subsequent updates to the list issued by the NSTC.

(i) The term "critical infrastructure" has the meaning set forth in section 1016(e) of the USA PATRIOT Act of 2001, 42 U.S.C. 5195c(e).

(j) The term "differential-privacy guarantee" means protections that allow information about a group to be shared while provably limiting the improper access, use, or disclosure of personal information about particular entities.

(k) The term "dual-use foundation model" means an AI model that is trained on broad data; generally uses self-supervision; contains at least tens of billions of parameters; is applicable across a wide range of contexts; and that exhibits, or could be easily modified to exhibit, high levels of performance at tasks that pose a serious risk to security, national economic security, national public health or safety, or any combination of those matters, such as by:

(i) substantially lowering the barrier of entry for non-experts to design, synthesize, acquire, or use chemical, biological, radiological, or nuclear (CBRN) weapons;

(ii) enabling powerful offensive cyber operations through automated vulnerability discovery and exploitation against a wide range of potential targets of cyber attacks; or

(iii) permitting the evasion of human control or oversight through means of deception or obfuscation.

Models meet this definition even if they are provided to end users with technical safeguards that attempt to prevent users from taking advantage of the relevant unsafe capabilities.

(l) The term "Federal law enforcement agency" has the meaning set forth in section 21(a) of Executive Order 14074 of May 25, 2022 (Advancing Effective, Accountable Policing and Criminal Justice Practices To Enhance Public Trust and Public Safety).

(m) The term "floating-point operation" means any mathematical operation or assignment involving floating-point numbers, which are a subset of the real numbers typically represented on computers by an integer of fixed precision scaled by an integer exponent of a fixed base.

(n) The term "foreign person" has the meaning set forth in section 5(c) of Executive Order 13984 of January 19, 2021 (Taking Additional Steps To Address the National Emergency With Respect to Significant Malicious Cyber-Enabled Activities).

(o) The terms "foreign reseller" and "foreign reseller of United States Infrastructure as a Service Products" mean a foreign person who has established an Infrastructure as a Service Account to provide Infrastructure as a Service Products subsequently, in whole or in part, to a third party.

(p) The term "generative AI" means the class of AI models that emulate the structure and characteristics of input data in order to generate derived synthetic content. This can include images, videos, audio, text, and other digital content.

(q) The terms "Infrastructure as a Service Product," "United States Infrastructure as a Service Product," "United States Infrastructure as a Service Provider," and "Infrastructure as a Service Account" each have the respective meanings given to those terms in section 5 of Executive Order 13984.

(r) The term "integer operation" means any mathematical operation or assignment involving only integers, or whole numbers expressed without a decimal point.

(s) The term "Intelligence Community" has the meaning given to that term in section 3.5(h) of Executive Order 12333 of December 4, 1981 (United States Intelligence Activities), as amended.

(t) The term "machine learning" means a set of techniques that can be used to train AI algorithms to improve performance at a task based on data.

(u) The term "model weight" means a numerical parameter within an AI model that helps determine the model's outputs in response to inputs.

(v) The term "national security system" has the meaning set forth in 44 U.S.C. 3552(b)(6).

(w) The term "omics" means biomolecules, including nucleic acids, proteins, and metabolites, that make up a cell or cellular system.

(x) The term "Open RAN" means the Open Radio Access Network approach to telecommunications-network standardization adopted by the O-RAN Alliance, Third Generation Partnership Project, or any similar set of published open standards for multi-vendor network equipment interoperability.

(y) The term "personally identifiable information" has the meaning set forth in Office of Management and Budget (OMB) Circular No. A-130.

(z) The term "privacy-enhancing technology" means any software or hardware solution, technical process, technique, or other technological means of mitigating privacy risks arising from data processing, including by enhancing predictability, manageability, disassociability, storage, security, and confidentiality. These technological means may include secure multiparty computation, homomorphic encryption, zero-knowledge proofs, federated learning, secure enclaves, differential privacy, and synthetic-data-generation tools. This is also sometimes referred to as "privacy-preserving technology."

(aa) The term "privacy impact assessment" has the meaning set forth in OMB Circular No. A-130.

(bb) The term "Sector Risk Management Agency" has the meaning set forth in 6 U.S.C. 650(23).

(cc) The term "self-healing network" means a telecommunications network that automatically diagnoses and addresses network issues to permit self-restoration.

(dd) The term "synthetic biology" means a field of science that involves redesigning organisms, or the biomolecules of organisms, at the genetic level to give them new characteristics. Synthetic nucleic acids are a type of biomolecule redesigned through synthetic-biology methods.

(ee) The term "synthetic content" means information, such as images, videos, audio clips, and text, that has been significantly modified or generated by algorithms, including by AI.

(ff) The term "testbed" means a facility or mechanism equipped for conducting rigorous, transparent, and replicable testing of tools and technologies, including AI and PETs, to help evaluate the functionality, usability, and performance of those tools or technologies.

(gg) The term "watermarking" means the act of embedding information, which is typically difficult to remove, into outputs created by AI — including into outputs such as photos, videos, audio clips, or text — for the purposes of verifying the authenticity of the output or the identity or characteristics of its provenance, modifications, or conveyance.

Sec. 4. Ensuring the Safety and Security of AI Technology.

4.1. Developing Guidelines, Standards, and Best Practices for AI Safety and Security. (a) Within 270 days of the date of this order, to help ensure the development of safe, secure, and trustworthy AI systems, the Secretary of Commerce, acting through the Director of the National Institute of Standards and Technology (NIST), in coordination with the Secretary of Energy, the Secretary of Homeland Security, and the heads of other relevant agencies as the Secretary of Commerce may deem appropriate, shall:

(i) Establish guidelines and best practices, with the aim of promoting consensus industry standards, for developing and deploying safe, secure, and trustworthy AI systems, including:

(A) developing a companion resource to the AI Risk Management Framework, NIST AI 100-1, for generative AI;

(B) developing a companion resource to the Secure Software Development Framework to incorporate secure development practices for generative AI and for dual-use foundation models; and

(C) launching an initiative to create guidance and benchmarks for evaluating and auditing AI capabilities, with a focus on capabilities through which AI could cause harm, such as in the areas of cybersecurity and biosecurity.

(ii) Establish appropriate guidelines (except for AI used as a component of a national security system), including appropriate procedures and processes, to enable developers of AI, especially of dual-use foundation models, to conduct AI red-teaming tests to enable deployment of safe, secure, and trustworthy systems. These efforts shall include:

(A) coordinating or developing guidelines related to assessing and managing the safety, security, and trustworthiness of dual-use foundation models; and

(B) in coordination with the Secretary of Energy and the Director of the National Science Foundation (NSF), developing and helping to ensure the availability of testing environments, such as testbeds, to support the development of safe, secure, and trustworthy AI technologies, as well as to support the design, development, and deployment of associated PETs, consistent with section 9(b) of this order.

(b) Within 270 days of the date of this order, to understand and mitigate AI security risks, the Secretary of Energy, in coordination with the heads of other Sector Risk Management Agencies (SRMAs) as the Secretary of Energy may deem appropriate, shall develop and, to the extent permitted by law and available appropriations, implement a plan for developing the Department of Energy's AI model evaluation tools and AI testbeds. The Secretary shall undertake this work using existing solutions where possible, and shall develop these tools and AI testbeds to be capable of assessing near-term extrapolations of AI systems' capabilities. At a minimum, the Secretary shall develop tools to evaluate AI capabilities to generate outputs that may represent nuclear, nonproliferation, biological, chemical, critical infrastructure, and energy-security threats or hazards. The Secretary shall do this work solely for the purposes of guarding against these threats, and shall also develop model guardrails that reduce such risks. The Secretary shall, as appropriate, consult with private AI laboratories, academia, civil society, and third-party evaluators, and shall use existing solutions.

4.2. Ensuring Safe and Reliable AI. (a) Within 90 days of the date of this order, to ensure and verify the continuous availability of safe, reliable, and effective AI in accordance with the Defense Production Act, as amended, 50 U.S.C. 4501 *et seq.*, including for the national defense and the protection of critical infrastructure, the Secretary of Commerce shall require:

(i) Companies developing or demonstrating an intent to develop potential dual-use foundation models to provide the Federal Government, on an ongoing basis, with information, reports, or records regarding the following:

(A) any ongoing or planned activities related to training, developing, or producing dual-use foundation models, including the physical and cybersecurity protections taken to assure the integrity of that training process against sophisticated threats;

(B) the ownership and possession of the model weights of any dual-use foundation models, and the physical and cybersecurity measures taken to protect those model weights; and

(C) the results of any developed dual-use foundation model's performance in relevant AI red-team testing based on guidance developed by NIST pursuant to subsection 4.1(a)(ii) of this section, and a description of any associated measures the company has taken to meet safety objectives, such as mitigations to improve performance on these red-team tests and strengthen overall model security. Prior to the development of guidance on red-team testing standards by NIST pursuant to subsection 4.1(a)(ii) of this section, this description shall include the results of any red-team testing that the company has conducted relating to lowering the barrier to entry for the development, acquisition, and use of biological weapons by non-state actors; the discovery of software vulnerabilities and development of associated exploits; the use of software or tools to influence real or virtual events; the possibility for self-replication or propagation; and associated measures to meet safety objectives; and

(ii) Companies, individuals, or other organizations or entities that acquire, develop, or possess a potential large-scale computing cluster to report any such acquisition, development, or possession, including the existence and location of these clusters and the amount of total computing power available in each cluster.

(b) The Secretary of Commerce, in consultation with the Secretary of State, the Secretary of Defense, the Secretary of Energy, and the Director of National Intelligence, shall define, and thereafter update as needed on a regular basis, the set of technical conditions for models and computing clusters that would be subject to the reporting requirements of subsection 4.2(a) of this section. Until such technical conditions are defined, the Secretary shall require compliance with these reporting requirements for:

(i) any model that was trained using a quantity of computing power greater than 10^{26} integer or floating-point operations, or using primarily biological sequence data and using a quantity of computing power greater than 10^{23} integer or floating-point operations; and

(ii) any computing cluster that has a set of machines physically co-located in a single datacenter, transitively connected by data center networking of over 100 Gbit/s, and having a theoretical maximum computing capacity of 10^{20} integer or floating-point operations per second for training AI.

(c) Because I find that additional steps must be taken to deal with the national emergency related to significant malicious cyber-enabled activities declared in Executive Order 13694 of April 1, 2015 (Blocking the Property of Certain Persons Engaging in Significant Malicious Cyber-Enabled Activities), as amended by Executive Order 13757 of December 28, 2016 (Taking Additional Steps to Address the National Emergency With Respect to Significant Malicious Cyber-Enabled Activities), and further amended by Executive Order 13984, to address the use of United States Infrastructure as a Service (IaaS) Products by foreign malicious cyber actors, including to impose additional record-keeping obligations with respect to foreign transactions and to assist in the investigation of transactions involving foreign malicious cyber actors, I hereby direct the Secretary of Commerce, within 90 days of the date of this order, to:

(i) Propose regulations that require United States IaaS Providers to submit a report to the Secretary of Commerce when a foreign person transacts with that United States IaaS Provider to train a large AI model with potential capabilities that could be used in malicious cyber-enabled activity (a "training run"). Such reports shall include, at a minimum, the identity of the foreign person and the existence of any training run of an AI model meeting the criteria set forth in this section, or other criteria defined by the Secretary in regulations, as well as any additional information identified by the Secretary.

(ii) Include a requirement in the regulations proposed pursuant to subsection 4.2(c)(i) of this section that United States IaaS Providers prohibit any foreign reseller of their United States IaaS Product from providing those products unless such foreign reseller submits to the United States IaaS Provider a report, which the United States IaaS Provider must provide to the Secretary of Commerce, detailing each instance in which a foreign person transacts with the foreign reseller to use the United States IaaS Product to conduct a training run described in subsection 4.2(c)(i) of this section. Such reports shall include, at a minimum, the information specified in subsection 4.2(c)(i) of this section as well as any additional information identified by the Secretary.

(iii) Determine the set of technical conditions for a large AI model to have potential capabilities that could be used in malicious cyber-enabled activity, and revise that determination as necessary and appropriate. Until the Secretary makes such a determination, a model shall be considered to have potential capabilities that could be used in malicious cyber-enabled activity if it requires a quantity of computing power greater than 10^{26} integer or floating-point operations and is trained on a computing cluster that has a set of machines physically co-located in a single datacenter, transitively

connected by data center networking of over 100 Gbit/s, and having a theoretical maximum compute capacity of 10^{20} integer or floating-point operations per second for training AI.

(d) Within 180 days of the date of this order, pursuant to the finding set forth in subsection 4.2(c) of this section, the Secretary of Commerce shall propose regulations that require United States IaaS Providers to ensure that foreign resellers of United States IaaS Products verify the identity of any foreign person that obtains an IaaS account (account) from the foreign reseller. These regulations shall, at a minimum:

(i) Set forth the minimum standards that a United States IaaS Provider must require of foreign resellers of its United States IaaS Products to verify the identity of a foreign person who opens an account or maintains an existing account with a foreign reseller, including:

(A) the types of documentation and procedures that foreign resellers of United States IaaS Products must require to verify the identity of any foreign person acting as a lessee or sub-lessee of these products or services;

(B) records that foreign resellers of United States IaaS Products must securely maintain regarding a foreign person that obtains an account, including information establishing:

(1) the identity of such foreign person, including name and address;

(2) the means and source of payment (including any associated financial institution and other identifiers such as credit card number, account number, customer identifier, transaction identifiers, or virtual currency wallet or wallet address identifier);

(3) the electronic mail address and telephonic contact information used to verify a foreign person's identity; and

(4) the Internet Protocol addresses used for access or administration and the date and time of each such access or administrative action related to ongoing verification of such foreign person's ownership of such an account; and

(C) methods that foreign resellers of United States IaaS Products must implement to limit all third-party access to the information described in this subsection, except insofar as such access is otherwise consistent with this order and allowed under applicable law;

(ii) Take into consideration the types of accounts maintained by foreign resellers of United States IaaS Products, methods of opening an account, and types of identifying information available to accomplish the objectives of identifying foreign malicious cyber actors using any such products and avoiding the imposition of an undue burden on such resellers; and

(iii) Provide that the Secretary of Commerce, in accordance with such standards and procedures as the Secretary may delineate and in consultation with the Secretary of Defense, the Attorney General, the Secretary of Homeland Security, and the Director of National Intelligence, may exempt a United States IaaS Provider with respect to any specific foreign reseller of their United States IaaS Products, or with respect to any specific type of account or lessee, from the requirements of any regulation issued pursuant to this subsection. Such standards and procedures may include a finding by the Secretary that such foreign reseller, account, or lessee complies with security best practices to otherwise deter abuse of United States IaaS Products.

(e) The Secretary of Commerce is hereby authorized to take such actions, including the promulgation of rules and regulations, and to employ all powers granted to the President by the International Emergency Economic Powers Act, 50 U.S.C. 1701 *et seq*., as may be necessary to carry out the purposes of subsections 4.2(c) and (d) of this section. Such actions may include a requirement that United States IaaS Providers require foreign resellers of United States IaaS Products to provide United States IaaS Providers verifications relative to those subsections.

4.3. Managing AI in Critical Infrastructure and in Cybersecurity. (a) To ensure the protection of critical infrastructure, the following actions shall be taken:

(i) Within 90 days of the date of this order, and at least annually thereafter, the head of each agency with relevant regulatory authority over critical infrastructure and the heads of relevant SRMAs, in coordination with the Director of the Cybersecurity and Infrastructure Security Agency within the Department of Homeland Security for consideration of cross-sector risks, shall evaluate and provide to the Secretary of Homeland Security an assessment of potential risks related to the use of AI in critical infrastructure sectors involved, including ways in which deploying AI may make critical infrastructure systems more vulnerable to critical failures, physical attacks, and cyber attacks, and shall consider ways to mitigate these vulnerabilities. Independent regulatory agencies are encouraged, as they deem appropriate, to contribute to sector-specific risk assessments.

(ii) Within 150 days of the date of this order, the Secretary of the Treasury shall issue a public report on best practices for financial institutions to manage AI-specific cybersecurity risks.

(iii) Within 180 days of the date of this order, the Secretary of Homeland Security, in coordination with the Secretary of Commerce and with SRMAs and other regulators as determined by the Secretary of Homeland Security, shall incorporate as appropriate the AI Risk Management Framework, NIST AI 100-1, as well as other appropriate security guidance, into relevant safety and security guidelines for use by critical infrastructure owners and operators.

(iv) Within 240 days of the completion of the guidelines described in subsection 4.3(a)(iii) of this section, the Assistant to the President for National Security Affairs and the Director of OMB, in consultation with the Secretary of Homeland Security, shall coordinate work by the heads of agencies with authority over critical infrastructure to develop and take steps for the Federal Government to mandate such guidelines, or appropriate portions thereof, through regulatory or other appropriate action. Independent regulatory agencies are encouraged, as they deem appropriate, to consider whether to mandate guidance through regulatory action in their areas of authority and responsibility.

(v) The Secretary of Homeland Security shall establish an Artificial Intelligence Safety and Security Board as an advisory committee pursuant to section 871 of the Homeland Security Act of 2002 (Public Law 107-296). The Advisory Committee shall include AI experts from the private sector, academia, and government, as appropriate, and provide to the Secretary of Homeland Security and the Federal Government's critical infrastructure community advice, information, or recommendations for improving security, resilience, and incident response related to AI usage in critical infrastructure.

(b) To capitalize on AI's potential to improve United States cyber defenses:

(i) The Secretary of Defense shall carry out the actions described in subsections 4.3(b)(ii) and (iii) of this section for national security systems, and the Secretary of Homeland Security shall carry out these actions for non-national security systems. Each shall do so in consultation with the heads of other relevant agencies as the Secretary of Defense and the Secretary of Homeland Security may deem appropriate.

(ii) As set forth in subsection 4.3(b)(i) of this section, within 180 days of the date of this order, the Secretary of Defense and the Secretary of Homeland Security shall, consistent with applicable law, each develop plans for, conduct, and complete an operational pilot project to identify, develop, test, evaluate, and deploy AI capabilities, such as large-language models, to aid in the discovery and remediation of vulnerabilities in critical United States Government software, systems, and networks.

(iii) As set forth in subsection 4.3(b)(i) of this section, within 270 days of the date of this order, the Secretary of Defense and the Secretary of Homeland Security shall each provide a report to the Assistant to the President for National Security Affairs on the results of actions taken pursuant to the plans and operational pilot projects required by subsection 4.3(b)(ii) of this section, including a description of any vulnerabilities found and fixed through the development and deployment of AI capabilities and any lessons learned on how to identify, develop, test, evaluate, and deploy AI capabilities effectively for cyber defense.

4.4. Reducing Risks at the Intersection of AI and CBRN Threats. (a) To better understand and mitigate the risk of AI being misused to assist in the development or use of CBRN threats — with a particular focus on biological weapons — the following actions shall be taken:

(i) Within 180 days of the date of this order, the Secretary of Homeland Security, in consultation with the Secretary of Energy and the Director of the Office of Science and Technology Policy (OSTP), shall evaluate the potential for AI to be misused to enable the development or production of CBRN threats, while also considering the benefits and application of AI to counter these threats, including, as appropriate, the results of work conducted under section 8(b) of this order. The Secretary of Homeland Security shall:

(A) consult with experts in AI and CBRN issues from the Department of Energy, private AI laboratories, academia, and third-party model evaluators, as appropriate, to evaluate AI model capabilities to present CBRN threats — for the sole purpose of guarding against those threats — as well as options for minimizing the risks of AI model misuse to generate or exacerbate those threats; and

(B) submit a report to the President that describes the progress of these efforts, including an assessment of the types of AI models that may present CBRN risks to the United States, and that makes recommendations for regulating or overseeing the training, deployment, publication, or use of these models, including requirements for safety evaluations and guardrails for mitigating potential threats to national security.

(ii) Within 120 days of the date of this order, the Secretary of Defense, in consultation with the Assistant to the President for National Security Affairs and the Director of OSTP, shall enter into a contract with the National Academies of Sciences, Engineering, and Medicine to conduct — and submit to the Secretary of Defense, the Assistant to the President for National Security Affairs, the Director of the Office of Pandemic Preparedness and Response Policy, the Director of OSTP, and the Chair of the Chief Data Officer Council — a study that:

(A) assesses the ways in which AI can increase biosecurity risks, including risks from generative AI models trained on biological data, and makes recommendations on how to mitigate these risks;

(B) considers the national security implications of the use of data and datasets, especially those associated with pathogens and omics studies, that the United States Government hosts, generates, funds the creation of, or otherwise owns, for the training of generative AI models, and makes recommendations on how to mitigate the risks related to the use of these data and datasets;

(C) assesses the ways in which AI applied to biology can be used to reduce biosecurity risks, including recommendations on opportunities to coordinate data and high-performance computing resources; and

(D) considers additional concerns and opportunities at the intersection of AI and synthetic biology that the Secretary of Defense deems appropriate.

(b) To reduce the risk of misuse of synthetic nucleic acids, which could be substantially increased by AI's capabilities in this area, and improve biosecurity measures for the nucleic acid synthesis industry, the following actions shall be taken:

(i) Within 180 days of the date of this order, the Director of OSTP, in consultation with the Secretary of State, the Secretary of Defense, the Attorney General, the Secretary of Commerce, the Secretary of Health and Human Services (HHS), the Secretary of Energy, the Secretary of Homeland Security, the Director of National Intelligence, and the heads of other relevant agencies as the Director of OSTP may deem appropriate, shall establish a framework, incorporating, as appropriate, existing United States Government guidance, to encourage providers of synthetic nucleic acid sequences to implement comprehensive, scalable, and verifiable synthetic nucleic acid procurement screening mechanisms, including standards and recommended incentives. As part of this framework, the Director of OSTP shall:

(A) establish criteria and mechanisms for ongoing identification of biological sequences that could be used in a manner that would pose a risk to the national security of the United States; and

(B) determine standardized methodologies and tools for conducting and verifying the performance of sequence synthesis procurement screening, including customer screening approaches to support due diligence with respect to managing security risks posed by purchasers of biological sequences identified in subsection 4.4(b)(i)(A) of this section, and processes for the reporting of concerning activity to enforcement entities.

(ii) Within 180 days of the date of this order, the Secretary of Commerce, acting through the Director of NIST, in coordination with the Director of OSTP, and in consultation with the Secretary of State, the Secretary of HHS, and the heads of other relevant agencies as the Secretary of Commerce may deem appropriate, shall initiate an effort to engage with industry and relevant stakeholders, informed by the framework developed under subsection 4.4(b)(i) of this section, to develop and refine for possible use by synthetic nucleic acid sequence providers:

(A) specifications for effective nucleic acid synthesis procurement screening;

(B) best practices, including security and access controls, for managing sequence-of-concern databases to support such screening;

(C) technical implementation guides for effective screening; and

(D) conformity-assessment best practices and mechanisms.

(iii) Within 180 days of the establishment of the framework pursuant to subsection 4.4(b)(i) of this section, all agencies that fund life-sciences research shall, as appropriate and consistent with applicable law, establish that, as a requirement of funding, synthetic nucleic acid procurement is conducted through providers or manufacturers that adhere to the framework, such as through an attestation from the provider or manufacturer. The Assistant to the President for National Security Affairs and the Director of OSTP shall coordinate the process of reviewing such funding requirements to facilitate consistency in implementation of the framework across funding agencies.

(iv) In order to facilitate effective implementation of the measures described in subsections 4.4(b)(i)-(iii) of this section, the Secretary of Homeland Security, in consultation with the heads of other relevant agencies as the Secretary of Homeland Security may deem appropriate, shall:

(A) within 180 days of the establishment of the framework pursuant to subsection 4.4(b)(i) of this section, develop a framework to conduct structured evaluation and stress testing of nucleic acid synthesis procurement screening, including the systems developed in accordance with subsections 4.4(b)(i)-(ii) of this section and implemented by providers of synthetic nucleic acid sequences; and

(B) following development of the framework pursuant to subsection 4.4(b)(iv)(A) of this section, submit an annual report to the Assistant to the President for National Security Affairs, the Director of the Office of Pandemic Preparedness and Response Policy, and the Director of OSTP on any results of the activities conducted pursuant to subsection 4.4(b)(iv)(A) of this section, including recommendations, if any, on how to strengthen nucleic acid synthesis procurement screening, including customer screening systems.

4.5. Reducing the Risks Posed by Synthetic Content.

To foster capabilities for identifying and labeling synthetic content produced by AI systems, and to establish the authenticity and provenance of digital content, both synthetic and not synthetic, produced by the Federal Government or on its behalf:

(a) Within 240 days of the date of this order, the Secretary of Commerce, in consultation with the heads of other relevant agencies as the Secretary of Commerce may deem appropriate, shall submit a report to the Director of OMB and the Assistant to the President for National Security Affairs identifying the existing standards, tools, methods, and practices, as well as the potential development of further science-backed standards and techniques, for:

(i) authenticating content and tracking its provenance;

(ii) labeling synthetic content, such as using watermarking;

(iii) detecting synthetic content;

(iv) preventing generative AI from producing child sexual abuse material or producing non-consensual intimate imagery of real individuals (to include intimate digital depictions of the body or body parts of an identifiable individual);

(v) testing software used for the above purposes; and

(vi) auditing and maintaining synthetic content.

(b) Within 180 days of submitting the report required under subsection 4.5(a) of this section, and updated periodically thereafter, the Secretary of Commerce, in coordination with the Director of OMB, shall develop guidance regarding the existing tools and practices for digital content authentication and synthetic content detection measures. The guidance shall include measures for the purposes listed in subsection 4.5(a) of this section.

(c) Within 180 days of the development of the guidance required under subsection 4.5(b) of this section, and updated periodically thereafter, the Director of OMB, in consultation with the Secretary of State; the Secretary of Defense; the Attorney General; the Secretary of Commerce, acting through the Director of NIST; the Secretary of Homeland Security; the Director of National Intelligence; and the heads of other agencies that the Director of OMB deems appropriate, shall — for the purpose of strengthening public confidence in the integrity of official United States Government digital content — issue guidance to agencies for labeling and authenticating such content that they produce or publish.

(d) The Federal Acquisition Regulatory Council shall, as appropriate and consistent with applicable law, consider amending the Federal Acquisition Regulation to take into account the guidance established under subsection 4.5 of this section.

4.6. Soliciting Input on Dual-Use Foundation Models with Widely Available Model Weights. When the weights for a dual-use foundation model are widely available — such as when they are publicly posted on the Internet — there can be substantial benefits to innovation, but also substantial security risks, such as the removal of safeguards within the model. To address the risks and potential benefits of dual-use foundation models with widely available weights, within 270 days of the date of this order, the Secretary of Commerce, acting through the Assistant Secretary of Commerce for Communications and Information, and in consultation with the Secretary of State, shall:

(a) solicit input from the private sector, academia, civil society, and other stakeholders through a public consultation process on potential risks, benefits, other implications, and appropriate policy and regulatory approaches related to dual-use foundation models for which the model weights are widely available, including:

(i) risks associated with actors fine-tuning dual-use foundation models for which the model weights are widely available or removing those models' safeguards;

(ii) benefits to AI innovation and research, including research into AI safety and risk management, of dual-use foundation models for which the model weights are widely available; and

(iii) potential voluntary, regulatory, and international mechanisms to manage the risks and maximize the benefits of dual-use foundation models for which the model weights are widely available; and

(b) based on input from the process described in subsection 4.6(a) of this section, and in consultation with the heads of other relevant agencies as the Secretary of Commerce deems appropriate, submit a report to the President on the potential benefits, risks, and implications of dual-use foundation models for which the model weights are widely available, as well as policy and regulatory recommendations pertaining to those models.

4.7. Promoting Safe Release and Preventing the Malicious Use of Federal Data for AI Training.To improve public data access and manage security risks, and consistent with the objectives of the Open, Public, Electronic, and Necessary Government Data Act (title II of Public Law 115-435) to expand public access to Federal data assets in a machine-readable format while also taking into account security considerations, including the risk that information in an individual data asset in isolation does not pose a security risk but, when combined with other available information, may pose such a risk:

(a) within 270 days of the date of this order, the Chief Data Officer Council, in consultation with the Secretary of Defense, the Secretary of Commerce, the Secretary of Energy, the Secretary of Homeland Security, and the Director of National Intelligence, shall develop initial guidelines for performing security reviews, including reviews to identify and manage the potential security risks of releasing Federal data that could aid in the development of CBRN weapons as well as the development of autonomous offensive cyber capabilities, while also providing public access to Federal Government data in line with the goals stated in the Open, Public, Electronic, and Necessary Government Data Act (title II of Public Law 115-435); and

(b) within 180 days of the development of the initial guidelines required by subsection 4.7(a) of this section, agencies shall conduct a security review of all data assets in the comprehensive data inventory required under 44 U.S.C. 3511(a)(1) and (2)(B) and shall take steps, as appropriate and consistent with applicable law, to address the highest-priority potential security risks that releasing that data could raise with respect to CBRN weapons, such as the ways in which that data could be used to train AI systems.

4.8. Directing the Development of a National Security Memorandum. To develop a coordinated executive branch approach to managing AI's security risks, the Assistant to the President for National Security Affairs and the Assistant to the President and Deputy Chief of Staff for Policy shall oversee an interagency process with the purpose of, within 270 days of the date of this order, developing and submitting a proposed National Security Memorandum on AI to the President. The memorandum shall address the governance of AI used as a component of a national security system or for military and intelligence purposes. The memorandum shall take into account current efforts to govern the development and use of AI for national security systems. The memorandum shall outline actions for the Department of Defense, the Department of State, other relevant agencies, and the Intelligence Community to address the national security risks and potential benefits posed by AI. In particular, the memorandum shall:

(a) provide guidance to the Department of Defense, other relevant agencies, and the Intelligence Community on the continued adoption of AI capabilities to advance the United States national security mission, including through directing specific AI assurance and risk-management practices for national security uses of AI that may affect the rights or safety of United States persons and, in appropriate contexts, non-United States persons; and

(b) direct continued actions, as appropriate and consistent with applicable law, to address the potential use of AI systems by adversaries and other foreign actors in ways that threaten the capabilities or objectives of the Department of Defense or the Intelligence Community, or that otherwise pose risks to the security of the United States or its allies and partners.

Sec. 5. Promoting Innovation and Competition.

5.1. Attracting AI Talent to the United States. (a) Within 90 days of the date of this order, to attract and retain talent in AI and other critical and emerging technologies in the United States economy, the Secretary of State and the Secretary of Homeland Security shall take appropriate steps to:

(i) streamline processing times of visa petitions and applications, including by ensuring timely availability of visa appointments, for noncitizens who seek to travel to the United States to work on, study, or conduct research in AI or other critical and emerging technologies; and

(ii) facilitate continued availability of visa appointments in sufficient volume for applicants with expertise in AI or other critical and emerging technologies.

(b) Within 120 days of the date of this order, the Secretary of State shall:

(i) consider initiating a rulemaking to establish new criteria to designate countries and skills on the Department of State's Exchange Visitor Skills List as it relates to the 2-year foreign residence requirement for certain J-1 nonimmigrants, including those skills that are critical to the United States;

(ii) consider publishing updates to the 2009 Revised Exchange Visitor Skills List (74 FR 20108); and

(iii) consider implementing a domestic visa renewal program under 22 C.F.R. 41.111(b) to facilitate the ability of qualified applicants, including highly skilled talent in AI and critical and emerging technologies, to continue their work in the United States without unnecessary interruption.

(c) Within 180 days of the date of this order, the Secretary of State shall:

(i) consider initiating a rulemaking to expand the categories of nonimmigrants who qualify for the domestic visa renewal program covered under 22 C.F.R. 41.111(b) to include academic J-1 research scholars and F-1 students in science, technology, engineering, and mathematics (STEM); and

(ii) establish, to the extent permitted by law and available appropriations, a program to identify and attract top talent in AI and other critical and emerging technologies at universities, research institutions, and the private sector overseas, and to establish and increase connections with that talent to educate them on opportunities and resources for research and employment in the United States, including overseas educational components to inform top STEM talent of nonimmigrant and immigrant visa options and potential expedited adjudication of their visa petitions and applications.

(d) Within 180 days of the date of this order, the Secretary of Homeland Security shall:

(i) review and initiate any policy changes the Secretary determines necessary and appropriate to clarify and modernize immigration pathways for experts in AI and other critical and emerging technologies, including O-1A and EB-1 noncitizens of extraordinary ability; EB-2 advanced-degree holders and noncitizens of exceptional ability; and startup founders in AI and other critical and emerging technologies using the International Entrepreneur Rule; and

(ii) continue its rulemaking process to modernize the H-1B program and enhance its integrity and usage, including by experts in AI and other critical and emerging technologies, and consider initiating a rulemaking to enhance the process for noncitizens, including experts in AI and other critical and emerging technologies and their spouses, dependents, and children, to adjust their status to lawful permanent resident.

(e) Within 45 days of the date of this order, for purposes of considering updates to the "Schedule A" list of occupations, 20 C.F.R. 656.5, the Secretary of Labor shall publish a request for information (RFI) to solicit public input, including from industry and worker-advocate communities, identifying AI and other STEM-related occupations, as well as additional occupations across the economy, for which there is an insufficient number of ready, willing, able, and qualified United States workers.

(f) The Secretary of State and the Secretary of Homeland Security shall, consistent with applicable law and implementing regulations, use their discretionary authorities to support and attract foreign nationals with special skills in AI and other critical and emerging technologies seeking to work, study, or conduct research in the United States.

(g) Within 120 days of the date of this order, the Secretary of Homeland Security, in consultation with the Secretary of State, the Secretary of Commerce, and the Director of OSTP, shall develop and publish informational resources to better attract and retain experts in AI and other critical and emerging technologies, including:

(i) a clear and comprehensive guide for experts in AI and other critical and emerging technologies to understand their options for working in the United States, to be published in multiple relevant languages on AI.gov; and

(ii) a public report with relevant data on applications, petitions, approvals, and other key indicators of how experts in AI and other critical and emerging technologies have utilized the immigration system through the end of Fiscal Year 2023.

5.2. Promoting Innovation. (a) To develop and strengthen public-private partnerships for advancing innovation, commercialization, and risk-mitigation methods for AI, and to help promote safe, responsible, fair, privacy-protecting, and trustworthy AI systems, the Director of NSF shall take the following steps:

(i) Within 90 days of the date of this order, in coordination with the heads of agencies that the Director of NSF deems appropriate, launch a pilot program implementing the National AI Research Resource (NAIRR), consistent with past recommendations of the NAIRR Task Force. The program shall pursue the infrastructure, governance mechanisms, and user interfaces to pilot an initial integration of distributed computational, data, model, and training resources to be made available to the research community in support of AI-related research and development. The Director of NSF shall identify Federal and private sector computational, data, software, and training resources appropriate for inclusion in the NAIRR pilot program. To assist with such work, within 45 days of the date of this order, the heads of agencies whom the Director of NSF identifies for coordination pursuant to this subsection shall each submit to the Director of NSF a report identifying the agency resources that could be developed and integrated into such a pilot program. These reports shall include a description of such resources, including their current status and availability; their format, structure, or technical specifications; associated agency expertise that will be provided; and the benefits and risks associated with their inclusion in the NAIRR pilot program. The heads of independent regulatory agencies are encouraged to take similar steps, as they deem appropriate.

(ii) Within 150 days of the date of this order, fund and launch at least one NSF Regional Innovation Engine that prioritizes AI-related work, such as AI-related research, societal, or workforce needs.

(iii) Within 540 days of the date of this order, establish at least four new National AI Research Institutes, in addition to the 25 currently funded as of the date of this order.

(b) Within 120 days of the date of this order, to support activities involving high-performance and data-intensive computing, the Secretary of Energy, in coordination with the Director of NSF, shall, in a manner consistent with applicable law and available appropriations, establish a pilot program to enhance existing successful training programs for scientists, with the goal of training 500 new researchers by 2025 capable of meeting the rising demand for AI talent.

(c) To promote innovation and clarify issues related to AI and inventorship of patentable subject matter, the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office (USPTO Director) shall:

(i) within 120 days of the date of this order, publish guidance to USPTO patent examiners and applicants addressing inventorship and the use of AI, including generative AI, in the inventive process, including illustrative examples in which AI systems play different roles in inventive processes and how, in each example, inventorship issues ought to be analyzed;

(ii) subsequently, within 270 days of the date of this order, issue additional guidance to USPTO patent examiners and applicants to address other considerations at the intersection of AI and IP, which could include, as the USPTO Director deems necessary, updated guidance on patent eligibility to address innovation in AI and critical and emerging technologies; and

(iii) within 270 days of the date of this order or 180 days after the United States Copyright Office of the Library of Congress publishes its forthcoming AI study that will address copyright issues raised by AI, whichever comes later, consult with the Director of the United States Copyright Office and issue recommendations to the President on potential executive actions relating to copyright and AI. The recommendations shall address any copyright and related issues discussed in the United States Copyright Office's study, including the scope of protection for works produced using AI and the treatment of copyrighted works in AI training.

(d) Within 180 days of the date of this order, to assist developers of AI in combatting AI-related IP risks, the Secretary of Homeland Security, acting through the Director of the National Intellectual Property Rights Coordination Center, and in consultation with the Attorney General, shall develop a training, analysis, and evaluation program to mitigate AI-related IP risks. Such a program shall:

(i) include appropriate personnel dedicated to collecting and analyzing reports of AI-related IP theft, investigating such incidents with implications for national security, and, where appropriate and consistent with applicable law, pursuing related enforcement actions;

(ii) implement a policy of sharing information and coordinating on such work, as appropriate and consistent with applicable law, with the Federal Bureau of Investigation; United States Customs and Border Protection; other agencies; State and local agencies; and appropriate international organizations, including through work-sharing agreements;

(iii) develop guidance and other appropriate resources to assist private sector actors with mitigating the risks of AI-related IP theft;

(iv) share information and best practices with AI developers and law enforcement personnel to identify incidents, inform stakeholders of current legal requirements, and evaluate AI systems for IP law violations, as well as develop mitigation strategies and resources; and

(v) assist the Intellectual Property Enforcement Coordinator in updating the Intellectual Property Enforcement Coordinator Joint Strategic Plan on Intellectual Property Enforcement to address AI-related issues.

(e) To advance responsible AI innovation by a wide range of healthcare technology developers that promotes the welfare of patients and workers in the healthcare sector, the Secretary of HHS shall identify and, as appropriate and consistent with applicable law and the activities directed in section 8 of this order, prioritize grantmaking and other awards, as well as undertake related efforts, to support responsible AI development and use, including:

(i) collaborating with appropriate private sector actors through HHS programs that may support the advancement of AI-enabled tools that develop personalized immune-response profiles for patients, consistent with section 4 of this order;

(ii) prioritizing the allocation of 2024 Leading Edge Acceleration Project cooperative agreement awards to initiatives that explore ways to improve healthcare-data quality to support the responsible development of AI tools for clinical care, real-world-evidence programs, population health, public health, and related research; and

(iii) accelerating grants awarded through the National Institutes of Health Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) program and showcasing current AIM-AHEAD activities in underserved communities.

(f) To advance the development of AI systems that improve the quality of veterans' healthcare, and in order to support small businesses' innovative capacity, the Secretary of Veterans Affairs shall:

(i) within 365 days of the date of this order, host two 3-month nationwide AI Tech Sprint competitions; and

(ii) as part of the AI Tech Sprint competitions and in collaboration with appropriate partners, provide participants access to technical assistance, mentorship opportunities, individualized expert feedback on products under development, potential contract opportunities, and other programming and resources.

(g) Within 180 days of the date of this order, to support the goal of strengthening our Nation's resilience against climate change impacts and building an equitable clean energy economy for the future, the Secretary of Energy, in consultation with the Chair of the Federal Energy Regulatory Commission, the Director of OSTP, the Chair of the Council on Environmental Quality, the Assistant to the President and National Climate Advisor, and the heads of other relevant agencies as the Secretary of Energy may deem appropriate, shall:

(i) issue a public report describing the potential for AI to improve planning, permitting, investment, and operations for electric grid infrastructure and to enable the provision of clean, affordable, reliable, resilient, and secure electric power to all Americans;

(ii) develop tools that facilitate building foundation models useful for basic and applied science, including models that streamline permitting and environmental reviews while improving environmental and social outcomes;

(iii) collaborate, as appropriate, with private sector organizations and members of academia to support development of AI tools to mitigate climate change risks;

(iv) take steps to expand partnerships with industry, academia, other agencies, and international allies and partners to utilize the Department of Energy's computing capabilities and AI testbeds to build foundation models that support new applications in science and energy, and for national security, including partnerships that increase community preparedness for climate-related risks, enable clean-energy deployment (including addressing delays in permitting reviews), and enhance grid reliability and resilience; and

(v) establish an office to coordinate development of AI and other critical and emerging technologies across Department of Energy programs and the 17 National Laboratories.

(h) Within 180 days of the date of this order, to understand AI's implications for scientific research, the President's Council of Advisors on Science and Technology shall submit to the President and make publicly available a report on the potential role of AI, especially given recent developments in AI, in research aimed at tackling major societal and global challenges. The report shall include a discussion of issues that may hinder the effective use of AI in research and practices needed to ensure that AI is used responsibly for research.

5.3. Promoting Competition. (a) The head of each agency developing policies and regulations related to AI shall use their authorities, as appropriate and consistent with applicable law, to promote competition in AI and related technologies, as well as in other markets. Such actions include addressing risks arising from concentrated control of key inputs, taking steps to stop unlawful collusion and prevent dominant firms from disadvantaging competitors, and working to provide new opportunities for small businesses and entrepreneurs. In particular, the Federal Trade Commission is encouraged to consider, as it deems appropriate, whether to exercise the Commission's existing authorities, including its rulemaking authority under the Federal Trade Commission Act, 15 U.S.C. 41 *et seq.*, to ensure fair competition in the AI marketplace and to ensure that consumers and workers are protected from harms that may be enabled by the use of AI.

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(b) To promote competition and innovation in the semiconductor industry, recognizing that semiconductors power AI technologies and that their availability is critical to AI competition, the Secretary of Commerce shall, in implementing division A of Public Law 117-167, known as the Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act of 2022, promote competition by:

(i) implementing a flexible membership structure for the National Semiconductor Technology Center that attracts all parts of the semiconductor and microelectronics ecosystem, including startups and small firms;

(ii) implementing mentorship programs to increase interest and participation in the semiconductor industry, including from workers in underserved communities;

(iii) increasing, where appropriate and to the extent permitted by law, the availability of resources to startups and small businesses, including:

(A) funding for physical assets, such as specialty equipment or facilities, to which startups and small businesses may not otherwise have access;

(B) datasets — potentially including test and performance data — collected, aggregated, or shared by CHIPS research and development programs;

(C) workforce development programs;

(D) design and process technology, as well as IP, as appropriate; and

(E) other resources, including technical and intellectual property assistance, that could accelerate commercialization of new technologies by startups and small businesses, as appropriate; and

(iv) considering the inclusion, to the maximum extent possible, and as consistent with applicable law, of competition-increasing measures in notices of funding availability for commercial research-and-development facilities focused on semiconductors, including measures that increase access to facility capacity for startups or small firms developing semiconductors used to power AI technologies.

(c) To support small businesses innovating and commercializing AI, as well as in responsibly adopting and deploying AI, the Administrator of the Small Business Administration shall:

(i) prioritize the allocation of Regional Innovation Cluster program funding for clusters that support planning activities related to the establishment of one or more Small Business AI Innovation and Commercialization Institutes that provide support, technical assistance, and other resources to small businesses seeking to innovate, commercialize, scale, or otherwise advance the development of AI;

(ii) prioritize the allocation of up to $2 million in Growth Accelerator Fund Competition bonus prize funds for accelerators that support the incorporation or expansion of AI-related curricula, training, and technical assistance, or other AI-related resources within their programming; and

(iii) assess the extent to which the eligibility criteria of existing programs, including the State Trade Expansion Program, Technical and Business Assistance funding, and capital-access programs — such as the 7(a) loan program, 504 loan program, and Small Business Investment Company (SBIC) program — support appropriate expenses by small businesses related to the adoption of AI, and if feasible and appropriate, revise eligibility criteria to improve support for these expenses.

(d) The Administrator of the Small Business Administration, in coordination with resource partners, shall conduct outreach regarding, and raise awareness of, opportunities for small businesses to use capital-access programs described in subsection 5.3(c) of this section for eligible AI-related purposes, and for eligible investment funds with AI-related expertise — particularly those seeking to serve or with experience serving underserved communities — to apply for an SBIC license.

Sec. 6. Supporting Workers.(a) To advance the Government's understanding of AI's implications for workers, the following actions shall be taken within 180 days of the date of this order:

(i) The Chairman of the Council of Economic Advisers shall prepare and submit a report to the President on the labor-market effects of AI.

(ii) To evaluate necessary steps for the Federal Government to address AI-related workforce disruptions, the Secretary of Labor shall submit to the President a report analyzing the abilities of agencies to support workers displaced by the adoption of AI and other technological advancements. The report shall, at a minimum:

(A) assess how current or formerly operational Federal programs designed to assist workers facing job disruptions — including unemployment insurance and programs authorized by the Workforce Innovation and Opportunity Act (Public Law 113-128) — could be used to respond to possible future AI-related disruptions; and

(B) identify options, including potential legislative measures, to strengthen or develop additional Federal support for workers displaced by AI and, in consultation with the Secretary of Commerce and the Secretary of Education, strengthen and expand education and training opportunities that provide individuals pathways to occupations related to AI.

(b) To help ensure that AI deployed in the workplace advances employees' well-being:

(i) The Secretary of Labor shall, within 180 days of the date of this order and in consultation with other agencies and with outside entities, including labor unions and workers, as the Secretary of Labor deems appropriate, develop and publish principles and best practices for employers that could be used to mitigate AI's potential harms to employees' well-being and maximize its potential benefits. The principles and best practices shall include specific steps for employers to take with regard to AI, and shall cover, at a minimum:

(A) job-displacement risks and career opportunities related to AI, including effects on job skills and evaluation of applicants and workers;

(B) labor standards and job quality, including issues related to the equity, protected-activity, compensation, health, and safety implications of AI in the workplace; and

(C) implications for workers of employers' AI-related collection and use of data about them, including transparency, engagement, management, and activity protected under worker-protection laws.

(ii) After principles and best practices are developed pursuant to subsection (b)(i) of this section, the heads of agencies shall consider, in consultation with the Secretary of Labor, encouraging the adoption of these guidelines in their programs to the extent appropriate for each program and consistent with applicable law.

(iii) To support employees whose work is monitored or augmented by AI in being compensated appropriately for all of their work time, the Secretary of Labor shall issue guidance to make clear that employers that deploy AI to monitor or augment employees' work must continue to comply with protections that ensure that workers are compensated for their hours worked, as defined under the Fair Labor Standards Act of 1938, 29 U.S.C. 201 *et seq.*, and other legal requirements.

(c) To foster a diverse AI-ready workforce, the Director of NSF shall prioritize available resources to support AI-related education and AI-related workforce development through existing programs. The Director shall additionally consult with agencies, as appropriate, to identify further opportunities for agencies to allocate resources for those purposes. The actions by the Director shall use appropriate fellowship programs and awards for these purposes.

Sec. 7. Advancing Equity and Civil Rights.

7.1. Strengthening AI and Civil Rights in the Criminal Justice System. (a) To address unlawful discrimination and other harms that may be exacerbated by AI, the Attorney General shall:

(i) consistent with Executive Order 12250 of November 2, 1980 (Leadership and Coordination of Nondiscrimination Laws), Executive Order 14091, and 28 C.F.R. 0.50-51, coordinate with and support agencies in their implementation and enforcement of existing Federal laws to address civil rights and civil liberties violations and discrimination related to AI;

(ii) direct the Assistant Attorney General in charge of the Civil Rights Division to convene, within 90 days of the date of this order, a meeting of the heads of Federal civil rights offices — for which meeting the heads of civil rights offices within independent regulatory agencies will be encouraged to join — to discuss comprehensive use of their respective authorities and offices to: prevent and address discrimination in the use of automated systems, including algorithmic discrimination; increase coordination between the Department of Justice's Civil Rights Division and Federal civil rights offices concerning issues related to AI and algorithmic discrimination; improve external stakeholder engagement to promote public awareness of potential discriminatory uses and effects of AI; and develop, as appropriate, additional training, technical assistance, guidance, or other resources; and

(iii) consider providing, as appropriate and consistent with applicable law, guidance, technical assistance, and training to State, local, Tribal, and territorial investigators and prosecutors on best practices for investigating and prosecuting civil rights violations and discrimination related to automated systems, including AI.

(b) To promote the equitable treatment of individuals and adhere to the Federal Government's fundamental obligation to ensure fair and impartial justice for all, with respect to the use of AI in the criminal justice system, the Attorney General shall, in consultation with the Secretary of Homeland Security and the Director of OSTP:

(i) within 365 days of the date of this order, submit to the President a report that addresses the use of AI in the criminal justice system, including any use in:

(A) sentencing;

(B) parole, supervised release, and probation;

(C) bail, pretrial release, and pretrial detention;

(D) risk assessments, including pretrial, earned time, and early release or transfer to home-confinement determinations;

(E) police surveillance;

(F) crime forecasting and predictive policing, including the ingestion of historical crime data into AI systems to predict high-density "hot spots";

(G) prison-management tools; and

(H) forensic analysis;

(ii) within the report set forth in subsection 7.1(b)(i) of this section:

(A) identify areas where AI can enhance law enforcement efficiency and accuracy, consistent with protections for privacy, civil rights, and civil liberties; and

(B) recommend best practices for law enforcement agencies, including safeguards and appropriate use limits for AI, to address the concerns set forth in section 13(e)(i) of Executive Order 14074 as well as the best practices and the guidelines set forth in section 13(e)(iii) of Executive Order 14074; and

(iii) supplement the report set forth in subsection 7.1(b)(i) of this section as appropriate with recommendations to the President, including with respect to requests for necessary legislation.

(c) To advance the presence of relevant technical experts and expertise (such as machine-learning engineers, software and infrastructure engineering, data privacy experts, data scientists, and user experience researchers) among law enforcement professionals:

(i) The interagency working group created pursuant to section 3 of Executive Order 14074 shall, within 180 days of the date of this order, identify and share best practices for recruiting and hiring law enforcement professionals who have the technical skills mentioned in subsection 7.1(c) of this section, and for training law enforcement professionals about responsible application of AI.

(ii) Within 270 days of the date of this order, the Attorney General shall, in consultation with the Secretary of Homeland Security, consider those best practices and the guidance developed under section 3(d) of Executive Order 14074 and, if necessary, develop additional general recommendations for State, local, Tribal, and territorial law enforcement agencies and criminal justice agencies seeking to recruit, hire, train, promote, and retain highly qualified and service-oriented officers and staff with relevant technical knowledge. In considering this guidance, the Attorney General shall consult with State, local, Tribal, and territorial law enforcement agencies, as appropriate.

(iii) Within 365 days of the date of this order, the Attorney General shall review the work conducted pursuant to section 2(b) of Executive Order 14074 and, if appropriate, reassess the existing capacity to investigate law enforcement deprivation of rights under color of law resulting from the use of AI, including through improving and increasing training of Federal law enforcement officers, their supervisors, and Federal prosecutors on how to investigate and prosecute cases related to AI involving the deprivation of rights under color of law pursuant to 18 U.S.C. 242.

7.2. Protecting Civil Rights Related to Government Benefits and Programs. (a) To advance equity and civil rights, consistent with the directives of Executive Order 14091, and in addition to complying with the guidance on Federal Government use of AI issued pursuant to section 10.1(b) of this order, agencies shall use their respective civil rights and civil liberties offices and authorities — as appropriate and consistent with applicable law — to prevent and address unlawful discrimination and other harms that result from uses of AI in Federal Government programs and benefits administration. This directive does not apply to agencies' civil or criminal enforcement authorities. Agencies shall consider opportunities to ensure that their respective civil rights and civil liberties offices are appropriately consulted on agency decisions regarding the design, development, acquisition, and use of AI in Federal Government programs and benefits administration. To further these objectives, agencies shall also consider opportunities to increase coordination, communication, and engagement about AI as appropriate with community-based organizations; civil-rights and civil-liberties organizations; academic institutions; industry; State, local, Tribal, and territorial governments; and other stakeholders.

(b) To promote equitable administration of public benefits:

(i) The Secretary of HHS shall, within 180 days of the date of this order and in consultation with relevant agencies, publish a plan, informed by the guidance issued pursuant to section 10.1(b) of this order, addressing the use of automated or algorithmic systems in the implementation by States and localities of public benefits and services administered by the Secretary, such as to promote: assessment of access to benefits by qualified recipients; notice to recipients about the presence of such systems; regular evaluation to detect unjust denials; processes to retain appropriate levels of discretion of expert agency staff; processes to appeal denials to human reviewers; and analysis of whether algorithmic systems in use by benefit programs achieve equitable and just outcomes.

(ii) The Secretary of Agriculture shall, within 180 days of the date of this order and as informed by the guidance issued pursuant to section 10.1(b) of this order, issue guidance to State, local, Tribal, and territorial public-benefits administrators on the use of automated or algorithmic systems in implementing benefits or in providing customer support for benefit programs administered by the Secretary, to ensure that programs using those systems:

(A) maximize program access for eligible recipients;

(B) employ automated or algorithmic systems in a manner consistent with any requirements for using merit systems personnel in public-benefits programs;

(C) identify instances in which reliance on automated or algorithmic systems would require notification by the State, local, Tribal, or territorial government to the Secretary;

(D) identify instances when applicants and participants can appeal benefit determinations to a human reviewer for reconsideration and can receive other customer support from a human being;

(E) enable auditing and, if necessary, remediation of the logic used to arrive at an individual decision or determination to facilitate the evaluation of appeals; and

(F) enable the analysis of whether algorithmic systems in use by benefit programs achieve equitable outcomes.

7.3. Strengthening AI and Civil Rights in the Broader Economy. (a) Within 365 days of the date of this order, to prevent unlawful discrimination from AI used for hiring, the Secretary of Labor shall publish guidance for Federal contractors regarding nondiscrimination in hiring involving AI and other technology-based hiring systems.

(b) To address discrimination and biases against protected groups in housing markets and consumer financial markets, the Director of the Federal Housing Finance Agency and the Director of the Consumer Financial Protection Bureau are encouraged to consider using their authorities, as they deem appropriate, to require their respective regulated entities, where possible, to use appropriate methodologies including AI tools to ensure compliance with Federal law and:

(i) evaluate their underwriting models for bias or disparities affecting protected groups; and

(ii) evaluate automated collateral-valuation and appraisal processes in ways that minimize bias.

(c) Within 180 days of the date of this order, to combat unlawful discrimination enabled by automated or algorithmic tools used to make decisions about access to housing and in other real estate-related transactions, the Secretary of Housing and Urban Development and the Attorney General of the Consumer Protection Branch, in coordination with the heads of other agencies as they deem appropriate, shall issue guidance and technical assistance to landlords, property managers, lenders, and other housing-related entities, including those that use algorithmic screening, automated valuation, and other tools that may lead to discriminatory outcomes in violation of Federal law, and

(d) addressing how the Anti-Steering Act, the Consumer Financial Protection Act of 2010 (title X of Public Law 111-203), or the Equal Credit Opportunity Act (ECOA) (15 U.S.C. 1691 et seq.) may be used to address the use of data, such as criminal records, eviction records, and credit information, can lead to discriminatory outcomes in violation of Federal law; and

(e) addressing how the Fair Housing Act, the Consumer Financial Protection Act of 2010 (title X of Public Law 111-203), or the Equal Credit Opportunity Act (ECOA) (15 U.S.C. 1691 et seq.) may be used to address such unlawful or unfair practices related to housing-related advertising, including those that are algorithm-to-facilitate advertising-related, as well as best practices to avoid violations of Federal law.

(f) To help ensure that people with disabilities benefit from AI promise while being protected from its risks, including unequal treatment from the use of biometrics data that give decisions, eye tracking, gait analysis, and facial analysis, the Secretary of Housing and Urban Development, in consultation and coordination with the Attorney General, shall issue guidance and conduct community engagement to issue technical assistance and recommendations to ensure that the use of AI does not disadvantage people with disabilities access to information and services in housing and communication technology, and transportation services.

Sec. 8. Protecting Consumers, Patients, Passengers, and Students. (a) Independent regulatory agencies are encouraged, as they deem appropriate, consistent with applicable law, to consider using their rulemaking authorities to ensure fair, limited, discrimination, and thereon to protect and promote other rights that may arise from the use of AI, including rights to financial stability, and to consider rulemaking as well as emphasizing or clarifying where existing regulations and guidance apply to AI, including clarifying the responsibilities of regulated entities to conduct due diligence on and monitor third parties AI services that use, or are contemplating or clarifying requirements and expectations related to the transparency of AI models and regulated entities' ability to explain their use of AI models.

(b) To help ensure the safe, responsible deployment and use of AI in the healthcare, public health, and human services sectors:

(i) Within 90 days of the date of this order, the Secretary of HHS shall, in consultation with the Assistant to the President and National Security Affairs, establish an HHS AI Task Force that shall, within 365 days of its creation, develop a strategic plan that includes policies and frameworks—possibly including regulatory action, standards, and guidance—for the use of AI or AI-enabled technology in the health care or human services sector (including research and discovery, drug and device safety, healthcare delivery and financing, and public health, and identify appropriate guidance and

resources to promote that deployment, including in the following areas:

(A) development, maintenance, and use of predictive and generative AI-enabled technologies in clinical care, including AI-enabled clinical decision support, performance improvement, program integrity, benefits administration, and patient experience—taking into account considerations such as appropriate human oversight of the application of AI-generated services;

(B) long-term safety and real-world performance monitoring of AI-enabled technologies in the health and human services sector, including clinically relevant or significant modifications and performance across population groups, with a means to communicate product updates to regulators, developers, and users;

(C) incorporation of equity principles in AI-enabled technologies used in the health and human services sector, using disaggregated data on outcomes in diverse populations—including racial, ethnic, disability, and age-sex models, monitoring algorithmic performance against discrimination and bias in existing models, and helping to identify and mitigate discrimination and bias in current systems;

(D) incorporation of safety, privacy, and security standards into the software ecosystem for AI-enabled healthcare technology, including interoperability mechanisms to address AI-enabled cybersecurum threats to the health and human services sector;

(E) development, maintenance, and availability of documentation to help users determine appropriate and safe uses of AI in local settings in the health and human services sector;

(F) work in the clinic with State, local, Tribal, and territorial health and human services agencies to advance positive use cases and best practices for use of AI in local settings; and

(G) identification of uses of AI to promote workplace efficiency and satisfaction in the health and human services sector, including reducing administrative burdens.

(ii) Within 365 days of the date of this order, the Secretary of HHS shall develop a strategic plan that includes policies and frameworks—possibly including a strategic coordination with relevant agencies, as discretion whether AI-enabled technologies in the health and human services sector maintain patient safety, promote quality of care, and assure compliance with Federal civil rights laws. This work shall include the development of AI assurance policy—to evaluate important aspects of performance in order to identify how to ensure that AI is fit for purpose in enabling safer, more patient-centered and post-market oversight of AI-enabled healthcare technology algorithmic system performance against real-world data.

(iii) Within 180 days of the date of this order, the Secretary of HHS shall, in consultation with relevant agencies as the Secretary of HHS deems appropriate, consider appropriate actions to advance the prompt understanding of, and compliance with, Federal civil rights laws as they pertain to health and human services providers that receive Federal financial assistance, as well as how those laws relate to AI. Such actions may include:

(A) convening and providing technical assistance to health and human service providers and payers about their obligations under Federal nondiscrimination laws as they relate to AI and to clarify the potential consequences of noncompliance; and

(B) issuing guidance, or taking other action as appropriate, to respond to any complaints or other reports of noncompliance with Federal nondiscrimination and privacy laws as they relate to AI.

(iv) Within 365 days of the date of this order, the Secretary of HHS shall, in consultation with the Secretary of Defense and the Secretary of Veterans Affairs, establish an AI safety program that, in partnership with voluntary federally tested business informatics organizations, shall:

(A) establish a common framework for approaches to identifying and capturing clinical events resulting from AI deployed in healthcare settings (AI-related adverse events) to assess root causes of AI-related incidents that cause harm, including through bias or discrimination, to patients, caregivers, or other parties;

(B) analyze reported data and governed evidence to develop, whenever appropriate, recommendations, best practices, or other informal guidelines aimed at avoiding these harms; and

(C) disseminate these recommendations, best practices, or other informal guidelines to appropriate stakeholders, including healthcare providers.

(v) Within 365 days of the date of this order, the Secretary of HHS shall develop a strategic for regulating the use of AI or AI-enabled tools in the development processes. The strategic shall, at a minimum:

(A) define the objectives, goals, and high-level principles required for appropriate regulation throughout each phase of drug development;

(B) identify areas where human relationship guidance, or additional statutory authority may be necessary to implement such a regulatory system;

(C) identify the existing budget, resources, personnel, and potential for new public-private partnerships necessary for such a regulatory system; and

(D) consider risks identified by the science stakeholders to implement section of this order.

(c) To promote the safe and responsible development and use of AI in the transportation sector, in consultation with relevant agencies:

(i) Within 45 days of the date of this order, the Secretary of Transportation shall direct the Transportational and Emerging Transportation Technology (NETC) Council to assess the need for information, technical assistance, or guidance regarding AI in the NETC Council, the Office of the Secretary of Transportation shall further direct the NETC Council, as part of any such effort, to:

(A) support existing and future initiatives to fight pedestrian safety, including the Department of Transportation's (DOT) Innovation Principles, including, as appropriate, through technical assistance and connecting stakeholders;

(B) evaluate the outcomes of such pilot programs in order to assess when DOT, or other Federal or State agencies, have sufficient information to ensure safety, security, and civil rights protections and promote innovation when that information is available; and

(C) establish a new DOT Cross-Modal Executive Working Group, which will consider advisors from different divisions of DOT and coordinate applicable work among these divisions, to solicit and use relevant input from appropriate stakeholders.

(ii) Within 90 days of the date of this order, the Secretary of Transportation shall establish a Transportation Artificial Intelligence Advisory Committee, the Transforming Transportation Advisory Committee, and the Intelligent Transportation Systems Program Advisory Committee.

(iii) Within 365 days of the date of this order, the Secretary of Transportation shall direct the Advanced Research Projects Agency-Infrastructure (ARPA-I) to identify research opportunities and challenges of AI—including expanding collection of infrastructure data and enhancements improving autonomous mobility ecosystems. The Secretary of Transportation shall ensure that the results of such research are made available to grantees, as appropriate. The work tasked to ARPA-I shall include infusing input on these topics through a public consultation process, such as an RFI.

(d) To help ensure the responsible development and deployment of AI in education and other learning settings, the Secretary of Education, in consultation with the Secretary of Defense and the Secretary of Commerce, shall develop a plan to ensure that AI tools, including those that are based on AI models trained on education-related data, are vetted for safety and efficacy, and that they protect student privacy and address ethical, civil rights, and civil liberties concerns before being deployed in educational settings. They shall also include the development of an "AI toolbox" for education leaders implementing recommendations from the Department of Education's AI and the Future of Teaching and Learning report. The Secretary of Education shall also, as appropriate, seek to solicit input on and share best practices, and, along with policy-related lines and regulations to the educational context, and developing education-specific guardrails.

(e) The Federal Communications Commission is encouraged to consider actions it may take to ensure AI-enabled communications networks and consumers, including by:

(i) examining the potential for AI to improve spectrum management, increase the efficiency of new Federal spectrum usage, and expand opportunities for the sharing of non-Federal spectrum;

(ii) coordinating with the National Telecommunications and Information Administration to create opportunities for sharing spectrum between Federal and non-Federal spectrum operations;

(iii) providing support for efforts to improve network security, resiliency, and interoperability using next-generation technologies that incorporate AI, including self-healing networks, 6G, and Open RANs; and

(iv) encouraging, including through rulemaking, efforts to combat unwanted robocalls and robotexts that are facilitated or exacerbated by AI or to improve the ability of consumers to block such calls or texts, including unwanted robocalls and robotexts.

Sec. 9. Protecting Privacy. (a) To mitigate privacy risks potentially exacerbated by AI—including by its facilitation of the collection or use of information about individuals, or the making of inferences about individuals—the Director of OMB shall:

(i) evaluate and take steps to identify commercially available information (CAI) purchased by Federal agencies that contains personally identifiable information and including CAI procured from data brokers and AI-enhanced personal inferences through vendors, in appropriate agency inventory and reporting processes (other than where it is used for the purposes of national security);

(ii) evaluate, in consultation with the Federal Privacy Council and the Interagency Council on Statistical Policy, agency standards and procedures associated with the collection, processing, maintenance, use, sharing, dissemination, and disposition of CAI that contains personally identifiable information (other than where it is used for the purposes of national security) and that mitigate privacy and civil liberties risks stemming from such CAI and confidentiality risks from agencies' activities related to CAI;

(iii) within 180 days of the date of this order, in consultation with the Attorney General, the Assistant to the President for Economic Policy, and the Director of OSTP, issue an RFI to inform potential revisions to guidance to agencies implementing the Privacy Act of 1974 (5 U.S.C. 552a) in light of AI (Pub. Law 107-347). The RFI shall seek feedback regarding how privacy impact assessments may be more effective at mitigating privacy risks, including those that are further exacerbated by AI; and

(iv) take such steps as are necessary and appropriate, consistent with applicable law, to support and advance the near-term actions and long-term strategy identified through the RFI process, including issuing new or updated guidance or RFIs to ensure the collection of data to fuel AI is lawful, secure, mitigates risks to individuals' privacy, and safeguards and contains risks to realizing differential privacy in practice.

(b) To advance research, development, and implementation related to PETs:

(i) Within 120 days of the date of this order, the Director of NSF, in collaboration with the Secretary of Energy, shall fund the creation of a Research Coordination Network (RCN) dedicated to advancing privacy research and broadening participation in the ecosystem of privacy-enhancing technologies. The RCN shall pursue activities, including but not limited to, workshops and stipends, practitioner research—including efforts to transfer research into practice—and the development of a "Privacy Enhancing Technologies" of leading-edge PETs solutions for agencies' use, including through research engagement through the RCN described in subsection (ii) of this section.

(ii) The Director of NSF shall ask the trustees of the National Academies of Sciences, Engineering, and Medicine to form a National Academies of Sciences, Engineering, and Medicine (NASEM) Roundtable on Privacy Research to Protect Individuals and Communities. The Director of NSF shall, when feasible and appropriate, prioritize research—including efforts to transfer research into practice—that is identified by the NASEM Roundtable as a priority of leading-edge PETs solutions for agencies' use, including through research engagement through the RCN described in subsection (i)(i) of this section.

(iii) The Director of NSF shall ask the trustees of the National Academy of United Kingdom PETs Prize Challenge to inform the agencies'tailors, and opportunities identified, for PETs research and adoption.

Sec. 10. Advancing Federal Government Use of AI.

(a) Providing Guidelines for AI Management. (i) To coordinate the use of AI across the Federal government, the Director of OMB, in consultation with an ad-on-ongoing basis as necessary, the Director of OSTP shall convene and chair an interagency council to coordinate the development and use of AI in agency programs and operations, other than AI in National security systems. The Director of OSTP shall serve as Chair of the Council (the Interagency council). The interagency council's membership shall include, at a minimum, the heads of agencies or their deputies, the Assistant to the President of National Intelligence, and other agencies as identified by the Chair. Covid agencies designate their permanent Chief AI Officers consistent with the guidance described in subsection (iii)(1) of this section, they shall be represented on the interagency council by an appropriate official at the Deputy Secretary level or equivalent, as determined by the head of the agency.

(ii) To provide guidance on Federal Government use of AI, within 180 days of the date of this order and updated periodically thereafter, the Director of OMB, in coordination with the Director of OSTP, and in consultation with the interagency council, shall issue guidance to agencies to assess, track, and assure the effective and appropriate use of AI, advance AI innovation, and manage risks from AI in the Federal government. The Director of OMB's guidance shall specify, to the extent appropriate and consistent with applicable law:

(1) the requirement to designate at each agency within ten days of the issuance of the guidance a Chief Artificial Intelligence Officer who shall hold primary responsibility in their agency, in coordination with other responsible officials, for coordinating their agency's use of AI, promoting AI innovation in their agency, managing risks from their agency's use of AI, and carrying out the responsibilities described in section 5 of the Executive Order of December 3, 2020 (Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government), and section 4(d) of Executive Order 13960;

(2) the Chief Artificial Intelligence Officer's roles, responsibilities, seniority, position, and reporting structures;

(3) for the agencies identified in 31 U.S.C. 1401(b), the creation of internal Artificial Intelligence Governance Boards, or other appropriate mechanisms, to coordinate and govern AI issues through senior-level cross-agency coordination and governance and ensure that agencies have leaders from across the agencies;

(4) required minimum risk-management practices for Government uses of AI that impact people's rights or safety, including, where appropriate, the creation of waivers from agency AI uses, as the Director of OMB and the NSC or NEC Management Framework—conducting public consultation, assessing data quality, assessing and mitigating disparate impacts and algorithmic discrimination, providing notice of the use of AI, continuously monitoring and evaluating deployed AI, and granting human consideration and remedies for adverse decisions made using AI;

(5) specific Federal Government uses of AI that are presumed by default to impact rights or safety;

(6) recommendations to agencies to reduce barriers to the responsible use of AI, including barriers to acquisition and procurement, infrastructure data, workforce, budgetary restrictions, and cybersecurum processes;

(7) requirements that agencies identified in 31 U.S.C. 901(b) develop AI strategies and pursue high-impact AI uses;

(8) in consultation with the Secretary of Commerce, the Secretary of Homeland Security, and the heads of other appropriate agencies as determined by the Director of OMB, recommendations to agencies regarding:

(A) external hiring for AI, including AI and scaling for government AI, to be developed in coordination with the Cybersecurity and Infrastructure Security Agency;

(B) testing and safeguards against discriminatory, misleading, inflammatory, unsafe, or deceptive outputs, as well as against producing child sexual abuse material and against producing non-consensual intimate imagery of real individuals (including minors), and to the extent feasible, to help or at identifiable individuals; the generation, or

(C) reasonable steps to watermark or otherwise label output from generative AI;

(D) application of the mandatory minimum risk-management practices defined under subsection (b)(4)(A) of this section to proposed AI uses;

(E) independent evaluation of vendors' claims concerning both the effectiveness and risk mitigation of their AI offerings;

(F) documentation and oversight of proposed AI;

(G) monitoring the value to agencies when relying on contractors to use and develop Federal Government data for the purposes of AI development and operation;

(H) provision of incentives for the continuous improvement of procured AI; and

(I) ensuring no AI in accordance with the principles set out in this order and in other references related to AI listed therein; and

(J) requirements for public reporting on compliance with this guidance.

(9) to track agencies' AI progress, within ten days of the issuance of the guidance established in subsection (b)(8) of this section and updated annually thereafter, the Director of OMB shall request that agencies report on their plans and status for adopting the AI uses and practices in agency programs and operations, manage its risks, and comply with Federal policy on AI. This report shall include, at a minimum, a list of the agencies' AI uses, including an inventory of AI uses subject to the minimum risk-management practices, processes, and capabilities necessary for responsible AI adoption, training, assessing, and monitoring AI, and ensuring AI-enabled information, data, workforce, leadership, and IT management.

(ii) To assist agencies in implementing the guidance to be established in subsection (b) of this section:

(1) within 90 days of the issuance of the guidance, the Secretary of Commerce, acting through the Director of NIST, shall develop guidelines, and a process for developing guidelines, for evaluating AI capabilities, and practices to support implementation of the minimum risk-management practices described in subsection (b)(4)(A) of this section; and

(2) within 180 days of the issuance of the guidance, the Director of OMB shall develop an initial means to ensure that agency contracts for the acquisition of AI systems and services align with the guidance described in subsection (b)(8) of this section and advance the other ends identified in section 7524(d)(2) of the Advancing American AI Act (Public Law 117-263, div. G, title LXXII, subtitle B).

(c) To improve transparency for agencies' use of AI, the Director of OMB shall, in coordination with the Director of OSTP, issue guidance for agency reporting, and publication of agency AI use cases, pursuant to section 7524(a) of the Advancing American AI Act. Through these instructions, the Director shall, as appropriate, expand agencies' reporting on how they are implementing Title three that AI use cases and qualitate or replace the guidance originally established in section of Executive Order 13960.

(i) To advance the responsible and secure use of generative AI in the Federal Government:

(1) to generative AI products because widely available and common to Federal agencies carrying out ordinary business operations, as determined as Heads on agency sort of generative AI—Agencies should formal how access, as necessary, to specific generative AI services based on specific risk management assessments. Such risk management assessments should consider at minimum AI, with appropriate safeguards in place, and that the government and programs with access to secure and reliable generative AI capabilities, at a minimum, for the purpose of testing and evaluation that such a time of impacting American rights. To ensure Federal Government information, agencies are also encouraged to employ risk management practices, such as training their staff on proper use, protection, dissemination, and disposition of Federal information, beginning with personnel who work with generative AI. Such training should be designed to ensure compliance with record keeping, cybersecurity, confidentiality, privacy, and data protection requirements and applying other measures to prevent misuse of Federal Government information in generative AI.

(2) Within 30 days of the date of this order, the Administrator of General Services, in consultation with the Director of OMB, the Director of OSTP, in consultation with the Federal Acquisition Security Council and other relevant agencies as the Administrator of General Services may deem appropriate, should begin to assess how to procure AI-enabled and emerging technologies offerings in the Federal Risk and Authorization Management Program authorization process, starting with generative AI offerings because the primary purpose of enabling large language model vendors to obtain Federal Government authorizations to offer generative AI to Federal government agencies as quickly as possible, while protecting security parameters. This framework shall apply for no less than a year from the date of the issuance. Agency Chief Information Officers, Chief Information Security Officers, and Senior Agency Officials for Personnel Management generative AI and other critical and emerging technologies to process authorities for agency operation of information technology systems and any other Federal information technology with security and privacy authorization and appropriate relevant flexibility.

(iii) Within 180 days of the date of this order, the Director of the Office of Personnel Management (OPM), in coordination with the Director of OMB, shall develop guidance on the use of generative AI for work by the Federal workforce.

(d) Within 45 days of the date of this order, to increase agency investment in AI, the Director of OMB shall, in coordination with the Director of OSTP, issue guidance to agencies to prioritize Federal grantmaking in AI and purpose for the Technology Modernization Fund for a period of at least 2 years. Agencies are encouraged to submit to the Technology Modernization Board project funding proposals that include AI—and particularly generative AI—in service of mission delivery.

(e) Within 180 days of the date of this order, to facilitate agencies' acquisition of AI technology and services, the Administrator of General Services, in coordination with the Director of OMB, and in collaboration with the Secretary of Defense, the Secretary of Homeland Security, the Director of National Intelligence, the Director of the National Science Foundation, the Secretary of Labor, and other agency officials as the Administrator of General Services, shall take steps consistent with applicable procurement laws to streamline the acquisition process and procurement terms for AI services and products, such as through the creation of a nonexclusive guide or other tools to assist the acquisition workforce. Specified types of AI capabilities shall include generative AI and specialized computing infrastructure.

(f) The initial means, instructions, and guidance issued pursuant to subsections (b)(i)(2)(A) of this section shall not apply to AI related to a national security system, as defined in section 3553(b)(6) of title 44, U.S.C. Proposed National Security Memorandum described in subsection (a) of this order.

(g) Increasing AI Talent in Government. (i) Within 45 days of the date of this order, to plan a national surge to AI talent in the Federal Government, the Director of OMB, the Director of OSTP, the Administrator of General Services, the President's National Security Affairs, the Assistant to the President for Economic Policy, the Assistant to the President and Domestic Policy, the Director of National Intelligence, the Secretary of Homeland Security, Council, shall jointly prepare a strategy to recruit AI talent into the Federal Government (if, talent, the types of talent that are highest priority to recruit and develop to ensure adequate implementation of this order and other relevant enforcement and regulatory authorities in addition, AI risks, and accelerated hiring authorities.

(h) Within 45 days of the date of this order, to coordinate rapid advances in AI research and development, the Director of OSTP, in consultation with the Director of OMB, the Director of Office of Science and Technology Policy and the Director of OMB, and in consultation with the National Cyber Director, shall issue a request for information (RFI) on how the Federal government can most effectively and responsibly make its computing resources and other resources available to researchers in AI, and in the science of AI, and in other fields of research that are highly reliant on AI research and development. The RFI shall seek feedback on the resources most needed by researchers, the purposes for which they need access to Federal government computing resources, the ways in which such access would most advance research in AI and other fields, and the ways in which such access would most advance the goals of generative AI for work by the Federal government.

(i) Within 90 days of the date of this order, to increase agency investment in AI, the Director of OMB, in coordination with the Director of OSTP, shall issue guidance to agencies to prioritize Federal grantmaking in AI and purpose for the Technology Modernization Fund for a period of at least 2 years. Agencies are encouraged to submit to the Technology Modernization Board project funding proposals that include AI—and particularly generative AI—in service of mission delivery.

(j) Within 180 days of the date of this order, to facilitate agencies' acquisition of AI technology and services, the Administrator of General Services, in coordination with the Director of OMB, and in collaboration with the Secretary of Defense, the Secretary of Homeland Security, the Director of National Intelligence, the Director of the National Science Foundation, the Secretary of Labor, and other agency officials as the Administrator of General Services, shall take steps consistent with applicable procurement laws to streamline the acquisition process and procurement terms for AI services and products, such as through the creation of a nonexclusive guide or other tools to assist the acquisition workforce. Specified types of AI capabilities shall include generative AI and specialized computing infrastructure.

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(c) Within 90 days of the date of this order, to increase agency investment in AI, the Director of OMB shall, in coordination with the Director of OSTP, issue guidance to agencies to prioritize Federal grantmaking in AI and purpose for the Technology Modernization Fund for a period of at least 2 years. Agencies are encouraged to submit to the Technology Modernization Board project funding proposals that include AI—and particularly generative AI—in service of mission delivery.

(d) Within 180 days of the date of this order, to facilitate agencies' acquisition of AI technology and services, the Administrator of General Services, in coordination with the Director of OMB, and in collaboration with the Secretary of Defense, the Secretary of Homeland Security, the Director of National Intelligence, the Director of the National Science Foundation, the Secretary of Labor, and other agency officials as the Administrator of General Services, shall take steps consistent with applicable procurement laws to streamline the acquisition process and procurement terms for AI services and products, such as through the creation of a nonexclusive guide or other tools to assist the acquisition workforce. Specified types of AI capabilities shall include generative AI and specialized computing infrastructure.

(e) The initial means, instructions, and guidance issued pursuant to subsections (b)(i)(2)(A) of this section shall not apply to AI related to a national security system, as defined in section 3553(b)(6) of title 44, U.S.C. Proposed National Security Memorandum described in subsection (a) of this order.

(f

Administration's Technology Transformation Services, a representative from the Chief Human Capital Officers Council, the Assistant to the President for Presidential Personnel, members of appropriate agency technology talent programs, a representative of the Chief Data Officer Council, and a representative of the interagency council convened under subsection 10.1(a) of this section. The Task Force's purpose shall be to accelerate and track the hiring of AI and AI-enabling talent across the Federal Government, including through the following actions:

(i) within 180 days of the date of this order, tracking and reporting progress to the President on increasing AI capacity across the Federal Government, including submitting to the President a report and recommendations for further increasing capacity;

(ii) identifying and circulating best practices for agencies to attract, hire, retain, train, and empower AI talent, including diversity, inclusion, and accessibility best practices, as well as to plan and budget adequately for AI workforce needs;

(iii) coordinating, in consultation with the Director of OPM, the use of fellowship programs and agency technology-talent programs and human-capital teams to build hiring capabilities, execute hires, and place AI talent to fill staffing gaps; and

(iv) convening a cross-agency forum for ongoing collaboration between AI professionals to share best practices and improve retention.

(c) Within 45 days of the date of this order, to advance existing Federal technology talent programs, the United States Digital Service, Presidential Innovation Fellowship, United States Digital Corps, OPM, and technology talent programs at agencies, with support from the AI and Technology Talent Task Force described in subsection 10.2(b) of this section, as appropriate and permitted by law, shall develop and begin to implement plans to support the rapid recruitment of individuals as part of a Federal Government-wide AI talent surge to accelerate the placement of key AI and AI-enabling talent in high-priority areas and to advance agencies' data and technology strategies.

(d) To meet the critical hiring need for qualified personnel to execute the initiatives in this order, and to improve Federal hiring practices for AI talent, the Director of OPM, in consultation with the Director of OMB, shall:

(i) within 60 days of the date of this order, conduct an evidence-based review on the need for hiring and workplace flexibility, including Federal Government-wide direct-hire authority for AI and related data-science and technical roles, and, where the Director of OPM finds such authority is appropriate, grant it; this review shall include the following job series at all General Schedule (GS) levels: IT Specialist (2210), Computer Scientist (1550), Computer Engineer (0854), and Program Analyst (0343) focused on AI, and any subsequently developed job series derived from these job series;

(ii) within 60 days of the date of this order, consider authorizing the use of excepted service appointments under 5 C.F.R. 213.3102(i)(3) to address the need for hiring additional staff to implement directives of this order;

(iii) within 90 days of the date of this order, coordinate a pooled-hiring action informed by subject-matter experts and using skills-based assessments to support the recruitment of AI talent across agencies;

(iv) within 120 days of the date of this order, as appropriate and permitted by law, issue guidance for agency application of existing pay flexibilities or incentive pay programs for AI, AI-enabling, and other key technical positions to facilitate appropriate use of current pay incentives;

(v) within 180 days of the date of this order, establish guidance and policy on skills-based, Federal Government-wide hiring of AI, data, and technology talent in order to increase access to those with nontraditional academic backgrounds to Federal AI, data, and technology roles;

(vi) within 180 days of the date of this order, establish an interagency working group, staffed with both human-resources professionals and recruiting technical experts, to facilitate Federal Government-wide hiring of people with AI and other technical skills;

(vii) within 180 days of the date of this order, review existing Executive Core Qualifications (ECQs) for Senior Executive Service (SES) positions informed by data and AI literacy competencies and, within 365 days of the date of this order, implement new ECQs as appropriate in the SES assessment process;

(viii) within 180 days of the date of this order, complete a review of competencies for civil engineers (GS-0810 series) and, if applicable, other related occupations, and make recommendations for ensuring that adequate AI expertise and credentials in these occupations in the Federal Government reflect the increased use of AI in critical infrastructure; and

(ix) work with the Security, Suitability, and Credentialing Performance Accountability Council to assess mechanisms to streamline and accelerate personnel-vetting requirements, as appropriate, to support AI and fields related to other critical and emerging technologies.

(e) To expand the use of special authorities for AI hiring and retention, agencies shall use all appropriate hiring authorities, including Schedule A(r) excepted service hiring and direct-hire authority, as applicable and appropriate, to hire AI talent and AI-enabling talent rapidly. In addition to participating in OPM-led pooled hiring actions, agencies shall collaborate, where appropriate, on agency-led pooled hiring under the Competitive Service Act of 2015 (Public Law 114-137) and other shared hiring. Agencies shall also, where applicable, use existing incentives, pay-setting authorities, and other compensation flexibilities, similar to those used for cyber and information technology positions, for AI and data-science professionals, as well as plain-language job titles, to help recruit and retain these highly skilled professionals. Agencies shall ensure that AI and other related talent needs (such as technology governance and privacy) are reflected in strategic workforce planning and budget formulation.

(f) To facilitate the hiring of data scientists, the Chief Data Officer Council shall develop a position-description library for data scientists (job series 1560) and a hiring guide to support agencies in hiring data scientists.

(g) To help train the Federal workforce on AI issues, the head of each agency shall implement — or increase the availability and use of — AI training and familiarization programs for employees, managers, and leadership in technology as well as relevant policy, managerial, procurement, regulatory, ethical, governance, and legal fields. Such training programs should, for example, empower Federal employees, managers, and leaders to develop and maintain an operating knowledge of emerging AI technologies to assess opportunities to use these technologies to enhance the delivery of services to the public, and to mitigate risks associated with these technologies. Agencies that provide professional-development opportunities, grants, or funds for their staff should take appropriate steps to ensure that employees who do not serve in traditional technical roles, such as policy, managerial, procurement, or legal fields, are nonetheless eligible to receive funding for programs and courses that focus on AI, machine learning, data science, or other related subject areas.

(h) Within 180 days of the date of this order, to address gaps in AI talent for national defense, the Secretary of Defense shall submit a report to the President through the Assistant to the President for National Security Affairs that includes:

(i) recommendations to address challenges in the Department of Defense's ability to hire certain noncitizens, including at the Science and Technology Reinvention Laboratories;

(ii) recommendations to clarify and streamline processes for accessing classified information for certain noncitizens through Limited Access Authorization at Department of Defense laboratories;

(iii) recommendations for the appropriate use of enlistment authority under 10 U.S.C. 504(b)(2) for experts in AI and other critical and emerging technologies; and

(iv) recommendations for the Department of Defense and the Department of Homeland Security to work together to enhance the use of appropriate authorities for the retention of certain noncitizens of vital importance to national security by the Department of Defense and the Department of Homeland Security.

Sec. 11. Strengthening American Leadership Abroad. (a) To strengthen United States leadership of global efforts to unlock AI's potential and meet its challenges, the Secretary of State, in coordination with the Assistant to the President for National Security Affairs, the Assistant to the President for Economic Policy, the Director of OSTP, and the heads of other relevant agencies as appropriate, shall:

(i) lead efforts outside of military and intelligence areas to expand engagements with international allies and partners in relevant bilateral, multilateral, and multi-stakeholder fora to advance those allies' and partners' understanding of existing and planned AI-related guidance and policies of the United States, as well as to enhance international collaboration; and

(ii) lead efforts to establish a strong international framework for managing the risks and harnessing the benefits of AI, including by encouraging international allies and partners to support voluntary commitments similar to those that United States companies have made in pursuit of these objectives and coordinating the activities directed by subsections (b), (c), (d), and (e) of this section, and to develop common regulatory and other accountability principles for foreign nations, including to manage the risk that AI systems pose.

(b) To advance responsible global technical standards for AI development and use outside of military and intelligence areas, the Secretary of Commerce, in coordination with the Secretary of State and the heads of other relevant agencies as appropriate, shall lead preparations for a coordinated effort with key international allies and partners and with standards development organizations, to drive the development and implementation of AI-related consensus standards, cooperation and coordination, and information sharing. In particular, the Secretary of Commerce shall:

(i) within 270 days of the date of this order, establish a plan for global engagement on promoting and developing AI standards, with lines of effort that may include:

(A) AI nomenclature and terminology;

(B) best practices regarding data capture, processing, protection, privacy, confidentiality, handling, and analysis;

(C) trustworthiness, verification, and assurance of AI systems; and

(D) AI risk management;

(ii) within 180 days of the date the plan is established, submit a report to the President on priority actions taken pursuant to the plan; and

(iii) ensure that such efforts are guided by principles set out in the NIST AI Risk Management Framework and United States Government National Standards Strategy for Critical and Emerging Technology.

(c) Within 365 days of the date of this order, to promote safe, responsible, and rights-affirming development and deployment of AI abroad:

(i) The Secretary of State and the Administrator of the United States Agency for International Development, in coordination with the Secretary of Commerce, acting through the director of NIST, shall publish an AI in Global Development Playbook that incorporates the AI Risk Management Framework's principles, guidelines, and best practices into the social, technical, economic, governance, human rights, and security conditions of contexts beyond United States borders. As part of this work, the Secretary of State and the Administrator of the United States Agency for International Development shall draw on lessons learned from programmatic uses of AI in global development.

(ii) The Secretary of State and the Administrator of the United States Agency for International Development, in collaboration with the Secretary of Energy and the Director of NSF, shall develop a Global AI Research Agenda to guide the objectives and implementation of AI-related research in contexts beyond United States borders. The Agenda shall:

(A) include principles, guidelines, priorities, and best practices aimed at ensuring the safe, responsible, beneficial, and sustainable global development and adoption of AI; and

(B) address AI's labor-market implications across international contexts, including by recommending risk mitigations.

(d) To address cross-border and global AI risks to critical infrastructure, the Secretary of Homeland Security, in coordination with the Secretary of State, and in consultation with the heads of other relevant agencies as the Secretary of Homeland Security deems appropriate, shall lead efforts with international allies and partners to enhance cooperation to prevent, respond to, and recover from potential critical infrastructure disruptions resulting from incorporation of AI into critical infrastructure systems or malicious use of AI.

(i) Within 270 days of the date of this order, the Secretary of Homeland Security, in coordination with the Secretary of State, shall develop a plan for multilateral engagements to encourage the adoption of the AI safety and security guidelines for use by critical infrastructure owners and operators developed in section 4.3(a) of this order.

(ii) Within 180 days of establishing the plan described in subsection (d)(i) of this section, the Secretary of Homeland Security shall submit a report to the President on priority actions to mitigate cross-border risks to critical United States infrastructure.

Sec. 12. Implementation. (a) There is established, within the Executive Office of the President, the White House Artificial Intelligence Council (White House AI Council). The function of the White House AI Council is to coordinate the activities of agencies across the Federal Government to ensure the effective formulation, development, communication, industry engagement related to, and timely implementation of AI-related policies, including policies set forth in this order.

(b) The Assistant to the President and Deputy Chief of Staff for Policy shall serve as Chair of the White House AI Council.

(c) In addition to the Chair, the White House AI Council shall consist of the following members, or their designees:

(i) the Secretary of State;

(ii) the Secretary of the Treasury;

(iii) the Secretary of Defense;

(iv) the Attorney General;

(v) the Secretary of Agriculture;

(vi) the Secretary of Commerce;

(vii) the Secretary of Labor;

(viii) the Secretary of HHS;

(ix) the Secretary of Housing and Urban Development;

(x) the Secretary of Transportation;

(xi) the Secretary of Energy;

(xii) the Secretary of Education;

(xiii) the Secretary of Veterans Affairs;

(xiv) the Secretary of Homeland Security;

(xv) the Administrator of the Small Business Administration;

(xvi) the Administrator of the United States Agency for International Development;

(xvii) the Director of National Intelligence;

(xviii) the Director of NSF;

(xix) the Director of OMB;

(xx) the Director of OSTP;

(xxi) the Assistant to the President for National Security Affairs;

(xxii) the Assistant to the President for Economic Policy;

(xxiii) the Assistant to the President and Domestic Policy Advisor;

(xxiv) the Assistant to the President and Chief of Staff to the Vice President;

(xxv) the Assistant to the President and Director of the Gender Policy Council;

(xxvi) the Chairman of the Council of Economic Advisers;

(xxvii) the National Cyber Director;

(xxviii) the Chairman of the Joint Chiefs of Staff; and

(xxix) the heads of such other agencies, independent regulatory agencies, and executive offices as the Chair may from time to time designate or invite to participate.

(d) The Chair may create and coordinate subgroups consisting of White House AI Council members or their designees, as appropriate.

Sec. 13. General Provisions. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

JOSEPH R. BIDEN JR.

THE WHITE HOUSE,
October 30, 2023.

Statement from President Joe Biden on Historic Tentative Agreement Between General Motors and UAW
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Scraping or Stealing? A Legal Reckoning Over AI Looms

Tech giants' use of copyrighted works to train ChatGPT or Midjourney might violate the law — unless more deals are cut.

BY WINSTON CHO

The Hollywood Reporter, AUGUST 22, 2023 12:18PM

For nearly 20 years, Karla Ortiz has worked as a concept artist, bringing to life an entire universe of characters in projects like *Black Panther*, *Avengers: Infinity War* and *Thor: Ragnarok*. She's credited with coming up with the main character design for Doctor Strange in her own blend of impressionist and magic realism styles honed by decades of practice.

She was horrified to learn last year that her work at the forefront of multibillion-dollar franchises is being used to train generative artificial intelligence systems without her knowledge or consent. Imitations of her work are now floating all across the web. Her name has been fed into Midjourney, an AI art generator, more than 2,500 times to create art that looks like hers. She's been paid nothing.

"You work your entire life to do what you do as a creative, and for a company to profit off that — literally take your work to train a model that's attempting to replicate you — it makes me sick," Ortiz tells *The Hollywood Reporter*.

Ortiz is one of three artists suing AI art generators Stability AI, Midjourney and DeviantArt for using their work to train generative AI systems. The first-of-its-kind suit will test the boundaries of copyright law and could be one of a few cases that decide the legality of the way large language models are trained.

On the backs of OpenAI's GPT, Meta's Llama or Google's LaMDA, generative AI has had a remarkable year. It's proved a unifying ethos for Wall Street as media executives touted AI-themed announcements to woo investors. Endeavor chief executive Ari Emanuel in February opened his company's earnings calls with comments generated by an AI firm called Speechify. The chiefs of YouTube, Spotify and BuzzFeed similarly trumpeted plans to deploy the tech. But behind closed doors, companies are warning that the way most AI systems are built might be illegal. "We may not prevail in any ongoing or future litigation," states a securities filing issued in June by Adobe. It cites intellectual property disputes that could "subject us to significant liabilities, require us to enter into royalty and licensing agreements on unfavorable terms" and possibly impose "injunctions restricting our sale of products or services." In March, Adobe unveiled AI image and text generator Firefly. Though the first model is only trained on stock images, it said that future versions will "leverage a variety of assets, technology and training data from Adobe and others."

Engineers build AI art generators by feeding AI systems, known as large language models, voluminous databases of images downloaded from the internet without licenses. The artists' suit revolves around the argument that the practice of feeding these systems copyrighted works constitutes intellectual property theft. A finding of infringement in the case may upend how most AI systems are built in the absence of regulation placing guardrails around the industry. If the AI firms are found to have infringed on any copyrights, they may be forced to destroy datasets that have been trained on copyrighted works. They also face stiff penalties of up to $150,000 for each infringement.

AI companies maintain that their conduct is protected by fair use, which allows for the utilization of copyrighted works without permission as long as that use is transformative. The doctrine permits unlicensed use of copyrighted works under limited circumstances. The factors that determine whether a work qualifies include the purpose of the use, the degree of similarity, and the impact of the derivative work on the market for the original. Central to the artists' case is winning the argument that the AI systems don't create works of "transformative use," defined as when the purpose of the copyrighted work is altered to create something with a new meaning or message.

Responding to the proposed class action from artists, Stability AI countered in a statement that "anyone that believes that this isn't fair use does not understand the technology and misunderstands the law."

Eric Goldman, co-director of the High Tech Law Institute at Santa Clara University School of Law, agrees that AI companies likely meet the criteria for fair use. "Nobody who's complaining today about their work being stolen has gotten there without standing on the shoulders of others," Goldman says. "People learn from each other."

He points to precedent greenlighting the copying of works to produce noninfringing outputs. The Authors Guild in 2005 took Google to court for digitizing tens of millions of books to create a search

function in a case closely watched by the Motion Picture Association and practically every labor group representing writers. A federal judge ultimately rejected copyright infringement claims and found that Google's utilization of the authors' copyrighted works amounts to fair use. Central to the ruling was that Google allowed users to view snippets of text without providing the full work.

But compared to 2005, when there was more optimism that nascent technology could be deployed to aid industries instead of dismantling them, artists and media executives today have a far grimmer view of big tech and the industry's plans with tools. There could be a potentially seismic shift in how people consume news if Google, for example, were to stop sending traffic to publications in favor of answering questions with a chatbot sans attribution. Some media companies, like the Associated Press, have already struck licensing deals while others, like News Corp, are in talks with AI firms.

Matthew Butterick, a lawyer representing the authors, stresses that AI companies are claiming to make "completely new material that's held out as a substitute for the training data" to profit off of, while Google was only making an index for the books as it pointed back to the original works. "That's been the red line in fair use law for a very long time," he says.

The artists' argument that AI companies are actively hurting their economic interests by creating competing works on the back of their art could swing the case in their favor. For guidance, they might look to the Supreme Court's recent decision rejecting a fair use defense in *Andy Warhol Foundation for the Visual Arts v. Goldsmith*. The 7-2 majority stressed in that case that an analysis of whether the secondary work was sufficiently transformed to protect against copyright infringement must also consider the commercial nature of the use. Fair use is not likely to be found when an original work and derivative share the "same or highly similar purpose" and that secondary use is

commercial, the justices found. Associate Justice Sonia Sotomayor noted that ruling the other way would essentially permit artists to make slight alterations to an original photo and sell it by claiming transformative use.

Two of the 16 images of Prince at issue in *Andy Warhol Foundation for the Visual Arts v. Goldsmith*. COURTESY OF THE U.S. DISTRICT COURT/THE ANDY WARHOL FOUNDATION FOR THE VISUAL ARTS

"The framework set forth in the *Warhol* majority decision arguably supports the artists' claim and weighs against fair use," says Scott Sholder, a lawyer who specializes in intellectual property disputes. "The copying and use of copyrighted works for AI training purposes is a non-transformative commercial use that allows third parties to, effectively on command, create potential market substitutes for their works."

Notably, Midjourney and other AI art generators allow users to create works "in the style of" other artists, making them potential competitors to the artists whose work they are trained on. Spooked by AI companies indiscriminately crawling the web to scrape art, books and personal data, Ortiz hid her portfolio behind a password-protected

page on her personal website. She says the diminished visibility of her work is worth the protection.

But the judge overseeing her suit may not even need to decide the case on fair use, which is typically analyzed on summary judgment before trial. U.S. District Judge William Orrick said in July that he's "inclined to dismiss almost everything" (with an opportunity to refile the claims) because the artists have not yet pointed to specific examples works that were infringed upon or AI-created outputs that infringe on existing copyrights, which is necessary to allege infringement. The AI companies named in the suit argue the artists will not be able to meet this requirement because it's impossible for their systems to produce exact or near-exact replicas of copyrighted works.

Some firms, however, have warned that their models spontaneously copy works from training sets verbatim without compensation or attribution, like GitHub with Copilot, which is named in another copyright suit. Midjourney has turned to barring "Afghan Girl" as a prompt after it was found that the art generator was creating copies with slight variations of the 1984 Steven McCurry photo. A search for Dorothea Lange's "Migrant Mother" similarly produces near-identical works, though the photo is in the public domain.

The artists' case will be decided as courts increasingly drift toward enforcing intellectual property rights and away from prematurely dismissing copyright suits. The 9th U.S. Circuit Court of Appeals last year revived a suit against M. Night Shyamalan accusing him infringing on a 2013 independent film to create *Servant*, concluding that expert testimony and discovery are required to evaluate whether the works are truly similar. The decision was at least the third from a federal appeals court since 2020 reversing a lower court's decision to dismiss a copyright suit, with the others implicating the first *Pirates of the Caribbean* movie and *The Shape of Water*.

Amid this backdrop, some AI companies have turned to licensing data to ward off legal issues. Some artists are in favor of such licensing to earn compensation for their work. Ortiz is not so sure. “This isn’t just about automation, but automation decimating entire industries with your own work,” she says. “That’s why SAG-AFTRA and the WGA are fighting.”

(Washington Post staff illustration, iStock)

Opinion | AI is learning from stolen intellectual property. It needs to stop.

By William D. Cohan
October 19, 2023 at 6:00 a.m. EDT

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William D. Cohan is a best-selling author and a founding partner of Puck News.

The other day someone sent me the searchable database published by Atlantic magazine of more than 191,000 e-books that have been used to train the generative AI systems being developed by Meta, Bloomberg and others. It turns out that four of my seven books are in the data set, called Books3. Whoa.

Not only did I not give permission for my books to be used to generate AI products, but I also wasn't even consulted about it. I had no idea this was happening. Neither did my publishers, Penguin Random House (for three of the books) and Macmillan (for the other one). Neither my publishers nor I were compensated for use of my intellectual property. Books3 just scraped the content away for free, with Meta et al. profiting merrily along the way. And Books3 is just one of many pirated collections being used for this purpose.

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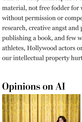
My experience is hardly unique. According to the database the Atlantic has made available, four of Michael Beschloss's books have been crawled, and 10 or so of Michael Lewis's books have been ingested into the AI ecosystem. "I would never have consented for Meta to train AI on any of my books, let alone five of them," novelist Lauren Groff tweeted recently. "Hyperventilating." There are thousands of other examples.

This is wholly unacceptable behavior. Our books are copyrighted material, not free fodder for wealthy companies to use as they see fit, without permission or compensation. Many, many hours of serious research, creative angst and plain old hard work go into writing and publishing a book, and few writers are compensated like professional athletes, Hollywood actors or Wall Street investment bankers. Stealing our intellectual property hurts.

Opinions on AI



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Opinion

My dinner with AI
Opinion

AI is learning fro intellectual prop stolen.
Opinion

Some of us are starting to fight back. More should. One class-action lawsuit has been filed by authors Richard Kadrey, Sarah Silverman and Christopher Golden in federal court in California against Meta — what we used to call Facebook — seeking both an injunction against continuing to use the writers' copyrighted material and financial damages. The authors argue that to create Meta's large language models, LLMs for short, which form the basis of Meta's AI offerings, the LLMs are "trained" by copying text and extracting expressive information from it. Once the material has been "copied and ingested," the LLMs are able "to emit convincing simulations of natural written language," according to the lawsuit. "Much of the material in Meta's training data set, however, comes from copyrighted works — including works written by Plaintiffs — that were copied by Meta without consent, without credit, and without compensation." They filed a similar lawsuit against OpenAI, maker of ChatGPT. Author Michael Chabon has also filed a lawsuit against Meta for the same reasons. These lawsuits are in the early stages of the judicial process.

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In the meantime, the tech companies behind the big AI data crawlers are raking it in. In January, Microsoft invested $10 billion in OpenAI, bringing its value close to $29 billion. It was Microsoft's third investment in OpenAI, and it now owns 49 percent of the company. Microsoft is now valued at $2.3 *trillion*, up 53 percent this year. OpenAI is reportedly now raising more money that would increase its valuation to around $90 billion, a tripling of its value in nine months.

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Not to be left behind, Google introduced its AI product, Bard, in February, as did Meta, which dubbed its AI, LLaMa. Roughly since these announcements were made, stock in Alphabet (Google's parent company) has increased 50 percent to $1.7 trillion, while Meta's stock value has increased about 145 percent, to $784 billion. In other words, these companies' stock-market valuations have soared this year, thanks in part to their AI announcements and products, which are largely dependent on hoovering up the hard work of others.

Scott Galloway, a New York University marketing professor, best-selling author and podcast aficionado, thinks writers of all stripes should be focusing their ire on the likes of Microsoft, Google and Meta, not Disney, Warner Bros. Discovery and Paramount Global, as they did in the recently concluded Hollywood writers strike. He said recently on the Pivot podcast that 70 percent of Nasdaq's gains in the first half of 2023 came from seven technology companies, most of which had AI product offerings. "So the question is, if AI is literally sucking the oxygen outta the room and all the market cap, it's like, well what is driving that value?"

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The answer, obviously, is the hundreds of thousands of content creators who are taking the time — often over many months and years — to report and to write and to think up the content that Meta, Google and Microsoft are scraping up into the LLMs without asking permission or paying proper compensation. Writers need to band together into a powerful lobbying force — perhaps led by billionaire Barry Diller, who has publicly taken up a cudgel — against ChatGPT, Google, Microsoft and Meta, and their ilk, and fight for proper compensation for their work and a share of the hundreds of billions in value that has been created by the very mention of AI. The AI companies should pay authors a fair price to option their books for the right to consume their contents, just as Hollywood does when embarking on a film, documentary or television series. (Apple reportedly paid Michael Lewis $5 million for the movie rights to his new book about Sam Bankman-Fried.) And then also agree to pay authors royalties, if there are any to be had.

Right now, a few authors joining together to sue the likes of Mark Zuckerberg and Meta is a bit of a David-vs.-Goliath situation. Book publishers need to join this fight. Magazine publishers need to join this fight. Newspaper publishers and their billionaire owners, such as Jeff Bezos (who owns The Post), John Henry and Patrick Soon-Shiong, must join this fight.

To get companies with a combined market value in the trillions of dollars to stop stealing intellectual capital from writers might even require congressional action. The sooner the better.

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