ARE 'FRIENDS' ELECTRIC?: A COMPARATIVIST APPROACH TO GUIDELINES FOR THE DEVELOPMENT AND IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE IN THE PEOPLE'S REPUBLIC OF CHINA AND THE UNITED STATES OF AMERICA

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I. Introduction

For years, we have heard warnings about the coming era of Artificial Intelligence (AI).¹ We have read about alarming dystopian concepts like slaughterbots² and gasped at the real-world consequences of Stanford University's prediction software concerning sexual orientation.³ AI is

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¹ Cf. Cade Metz, Busting the Myths about AI Invading Our Lives, N.Y. TIMES, (Dec. 13, 2017), https://www.nytimes.com/2017/12/13/technology/personaltech/busting-myths-ai.html?action.

² James Cooper & Jason Hsu, Editorial, *Machines Can't Be Left Without Ethics*, TAIPEI TIMES, (Dec. 14, 2018), https://www.taipeitimes.com/News/editorials/archives/2018/12/14/2003706066.

³ Rob Thubron, Stanford University's AI Can Tell if You're Gay or Straight from a Photo, TECHSPOT (Sept. 8, 2017), https://www.techspot.com/news/70905-stanford-university-ai-can-

increasingly used in decision-making for the allocation of education, employment,⁴ healthcare,⁵ justice,⁶ finance,⁷ and other private and public services. There are now criminal law procedures that routinely use AI risk assessment tools–from bail hearings to criminal sentencing.⁸ Over the last few years, businesses have used AI for important test cases and scaled up operations.⁹ We have also experienced many changes since November 2022 with OpenAI's introduction of ChatGPT and the rollout of Generative AI and Large Language Models in our society. There is naturally much worry over

tell-if-youre-gay.html; Sam Levin, New AI Can Guess Whether You're Gay or Straight from a Photograph, Guardian (Sept. 7, 2017), https://www.theguardian.com/technology/2017/sep/07/new-artificial-intelligence-can-tell-whether-youre-gay-or-straight-from-a-photograph. See also Yilun Wang & Michal Kosinski, Deep Neural Networks are More Accurate Than Humans at Detecting Sexual Orientation from Facial Images, 114 J. Personality Soc. Psych. 246, 246-57 (2018); James Cooper, Artificial Intelligence: Our Salvation or Curse?, L.A. Daily J. (Sept. 25, 2017), https://www.dailyjournal.com/articles/343603-artificial-intelligence-our-salvation-or-curse.

- ⁴ Pauline T. Kim, *Data-Driven Discrimination at Work*, 58 Wm. & MARY L. Rev. 857, 860 (2017) ("Employers are increasingly relying on data analytic tools to make personnel decisions...").
- ⁵ Sara Hansard, *Cigna Sued Over Alleged Automatic Patient Claims Denials (1)*, BLOOMBERG LAW (July 24, 2023), https://news.bloomberglaw.com/health-law-and-business/cigna-sued-over-alleged-automated-patient-claims-denials.
- ⁶ James Cooper & Kashyap Kompella, *Practice Tips: AI and Threats to the Criminal Justice System*, 45 L.A. LAW. 13 (Oct. 2022), https://lalawyer.advanced-pub.com/?issueID =40&pageID=11.
- ⁷ Jack Kelly, *Wells Fargo Predicts that Robots Will Steal 200,000 Banking Jobs Within The Next 10 Years*, Forbes (Oct. 8, 2019), https://www.forbes.com/sites/jackkelly/2019/10/08/wells-fargo-predicts-that-robots-will-steal-200000-banking-jobs-within-the-next-10-years/?sh=6ac9dd7168d7.
- ⁸ Univ. of Va. Sch. of L., Artificial Intelligence in Criminal Sentencing (Apr. 14, 2021), https://www.law.virginia.edu/news/videos-podcasts/artificial-intelligence-criminal-sentencing. See generally John Villasenor & Virginia Foggo, Artificial Intelligence, Due Process and Criminal Sentencing, 2020 MICH. St. L. Rev. 295 (2020). For a critique of this trend, see Alberto De Diego Carreras, The Moral (Un)intelligence Problem of Artificial Intelligence in Criminal Justice: A Comparative Analysis Under Different Theories of Punishment, 25 UCLA J. L. & TECH. 1 (2020).
- ⁹ See Bernard Marr, The 10 Best Examples of How Companies Use Artificial Intelligence in Practice, FORBES (Dec. 9, 2019), https://www.forbes.com/sites/bernardmarr/2019/12/09/the-10-best-examples-of-how-companies-use-artificial-intelligence-in-practice/?sh=3bada83b7978. See generally Ashley Watters, Using AI in Business: Examples

of Artificial Intelligence Application in Business, CompTIA (June 4, 2021), https://connect.comptia.org/blog/using-ai-in-business.

potential job losses, ¹⁰ misinformation concerning public health and safety, ¹¹ interference in the political process, ¹² and the destruction of creative industries. ¹³

It is no surprise then that enforceable rules concerning responsible use of AI continue to be of paramount importance. There are also the attendant worries over fairness and implicit bias. ¹⁴ Bias may indeed be baked into the algorithms. ¹⁵ AI has been found to be racist and discriminatory. ¹⁶ We rightly ask whether machines can properly apply ethics. ¹⁷ Other questions ponder the role of machines in developing intellectual property and issues of ownership and filing property interests. ¹⁸ How can we prevent AI from

¹⁰ Emil Skandul, *The Biggest Winners – and Losers – in the Coming AI Job Apocalypse*, Bus. Insider (Nov. 1, 2023), https://www.businessinsider.com/job-disruption-ai-future-careers-blue-collar-desk-work-2023-11. *See also* Behnam Tabrizi & Babak Pahlavan, *Companies That Replace People with AI Will Get Left Behind*, HARVARD Bus. Rev. (June 23, 2023), https://hbr.org/2023/06/companies-that-replace-people-with-ai-will-get-left-behind.

¹¹ Kashyap Kompella & James Cooper, *Artificial Intelligence and the Looming Misinformation Society*, The Hill (Dec. 19, 2022), https://thehill.com/opinion/technology/3780759-artificial-intelligence-and-the-looming-misinformation-society/.

¹² Kashyap Kompella & James Cooper, *ChatGPT Blues: The Coming Generative AI Gerrymandering of the American Mind*, THE HILL (Mar. 13, 2023), https://thehill.com/opinion/technology/3890357-chatgpt-blues-the-coming-generative-ai-gerrymandering-of-the-american-mind/.

¹³ Fernando Garibay, Kashyap Kompella & James Cooper, *AI-Generated Music is Officially a Hit: How Will it Change the Music Industry?*, THE HILL (Apr. 26, 2023), https://thehill.com/opinion/technology/3971398-ai-*generated-music-is-officially-a-hit-how-will-it-change-the-music-industry*/.

¹⁴ Jessica Guynn, *Google Photos Labeled Black People 'Gorillas'*, USA Today (July 1, 2015), https://www.usatoday.com/story/tech/2015/07/01/google-apologizes-after-photos-identify-black-people-as-gorillas/29567465/. *See also* Will Douglas Heaven, *Predictive Police Algorithms are Racist. They Need to be Dismantled.*, MIT TECH REV. (July 17, 2020), https://www.technologyreview.com/2020/07/17/1005396/predictive-policing-algorithms-racist-dismantled-machine-learning-bias-criminal-justice/.

¹⁵ Agbolade Omowole, Research Shows AI is Often Biased. Here's How to Make Algorithms Work for All of Us, WORLD ECON. FORUM (July 19, 2021), https://www.weforum.org/agenda/2021/07/ai-machine-learning-bias-discrimination/. See also Danielle Keats Citron & Frank Pasquale, The Scored Society: Due Process for Automated Predictions, 89 WASH. L. REV. 1, 4-5 (2014).

¹⁶ See Melissa Heikkila, *Dutch Scandal Serves as a Warning for Europe over Risk of Using Algorithms*, POLITICO (Mar. 29, 2022), https://www.politico.eu/article/dutch-scandal-serves-as-a-warning-for-europe-over-risks-of-using-algorithms/.

¹⁷ Can We Teach Robots Ethics?, BBC NEWS (Oct. 15, 2017), http://www.bbc.com/news/magazine-41504285. See also Cade Metz, Teaching AI Systems to Behave Themselves, N.Y. TIMES (Aug. 13, 2017), https://www.nytimes.com/2017/08/13/technology/artificial-intelligence-safety-training.html.

¹⁸ The U.S. Copyright Office decided that AI-generated works are not eligible for copyright. Shanti Escalante-De Mattei, *US Copyright Office: AI Generated Works Are Not Eligible for*

perpetuating wage inequality?¹⁹ Finally, what happens to the more than 300 million people who lose their jobs to AI in the coming years that Goldman Sachs estimates?²⁰

The government of the United States (U.S.) has been slow to craft its own set of priorities, funding opportunities, and national security interests, let alone pass an actual piece of legislation that regulates the AI space. The U.S. Government Accountability Office (GAO) explored the potential and pitfalls of the regulation of AI in a report released in June 2021:

AI is a transformative technology with applications in medicine, agriculture, manufacturing, transportation, defense, and many other areas. It also holds substantial promise for improving government operations. Federal guidance has focused on ensuring AI is responsible, equitable, traceable, reliable, and governable. Third-party assessments and audits are important to achieving these goals. However, AI systems pose unique challenges to such oversight because their inputs and operations are not always visible.²¹

There is no shortage of concerns about AI coming from different stakeholders. In March 2023, 1,000 tech leaders, researchers and others, including technology pioneers Elon Musk, Andrew Yang, and Steve Wozniak, released a signed letter that called for a moratorium on the development of the most powerful AI systems.²² Those 1,000 signatures were augmented by another 26,000 signatures within a few weeks.²³ By April

Copyright, ART NEWS (Mar. 21, 2023), https://www.artnews.com/art-news/news/ai-generator-art-text-us-copyright-policy-1234661683/.

¹⁹ Daron Acemoglu & Pascual Restrepo, *Tasks, Automation, and the Rise of US Wage Inequality* (Nat'l Bureau of Econ. Rsch., Working Paper No. 28920, 2021), https://www.nber.org/papers/w28920.

²⁰ Jan Hatzius, et al., *Global Economics Analyst: The Potentially Large Effects of Artificial Intelligence on Economic Growth*, GOLDMAN SACHS, at 2 (Mar. 26, 2023), https://www.key4biz.it/wp-content/uploads/2023/03/Global-Economics-Analyst_-The-Potentially-Large-Effects-of-Artificial-Intelligence-on-Economic-Growth-

Briggs_Kodnani.pdf. *Cf.* Mohamed Kande & Murat Sonmez, *Don't Fear AI. It Will Lead to Long-Term Job Growth*, WORLD ECON. FORUM (Oct. 26, 2020), https://www.weforum.org/agenda/2020/10/dont-fear-ai-it-will-lead-to-long-term-job-growth/.

²¹ AN ACCOUNTABILITY FRAMEWORK FOR FEDERAL AGENCIES AND OTHER AGENCIES, U.S. GOV'T ACCOUNTABILITY OFF., at highlights (June 2021), https://www.gao.gov/assets/gao-21-519sp-highlights.pdf.

²² Cade Metz & Gregory Schmidt, *Elon Musk and Others Call for Pause on A.I., Citing 'Profound Risks to Society'*, N.Y. TIMES (Mar. 29, 2023), https://www.nytimes.com/2023/03/29/technology/ai-artificial-intelligence-musk-risks.html.

²³ Tima Bansal, *Elon Musk And AI Leaders Call For GPT-4 To Pause: Is it About Managing Risks or Catching Up In The AI Race?*, FORBES (Apr. 17, 2023), https://www.forbes.com/sites/timabansal/2023/04/17/elon-musk-and-ai-leaders-call-for-gpt-4-to-pause-is-it-about-managing-risks-or-catching-up-in-the-ai-race/?sh=37ae299f7ed5.

2023, Geoffrey Hinton, the so-called Godfather of AI,²⁴ resigned from Google, stating that "[i]t is hard to see how you can prevent the bad actors using it for bad things."²⁵ The growth in machine learning (ML) technologies is so fast paced that many industries, including music²⁶ and film²⁷ are continually being disrupted.

On May 16, 2023, Sam Altman, CEO of Open AI, the company which developed and deployed ChatGPT to the public, appeared before the U.S. Senate Judiciary Subcommittee, asking for legislation to regulate the use of Artificial Intelligence. In his testimony before Congress, Altman stated: "As this technology advances, we understand that people are anxious about how it could change the way we live. We are too." By November 2023, Altman was fired, hired by OpenAI investor Microsoft, and then rehired by Open AI—all within five days. Much of this drama was reportedly related to concerns over AI in the future and the role the company should play in reducing harms. In the future and the role the company should play in reducing harms.

To date, the foundational normative work, that may lead to regulatory

²⁴ "Godfather of Artificial Intelligence" Weighs in on the Past and Potential of AI, CBS NEWS (Mar. 25, 2023) https://www.cbsnews.com/news/godfather-of-artificial-intelligence-weighs-in-on-the-past-and-potential-of-artificial-intelligence/; Frank Landymore, Godfather of AI Says There's a Minor Risk It'll Eliminate Humanity, THE BYTE (Mar. 27, 2023), https://futurism.com/the-byte/godfather-ai-risk-eliminate-humanity.

²⁵ Cade Metz, "The Godfather of AI" Leaves Google and Warns of Danger Ahead, N.Y. TIMES (May 1, 2023), https://www.nytimes.com/2023/05/01/technology/ai-google-chatbot-engineer-quits-hinton.html.

²⁶ Fernando Garibay, Kashyap Kompella & James Cooper, *AI-Generated Music is Officially a Hit – How Will it Change the Music Industry?*, THE HILL (Apr. 26, 2023), https://thehill.com/opinion/technology/3971398-ai-*generated-music-is-officially-a-hit-how-will-it-change-the-music-industry/*.

Emmet McDermott, AI Decision-Making in Hollywood is Already Here, Now What?, HOLLYWOOD REPORTER (May 4, 2023), https://www.hollywoodreporter.com/business/digital/ai-filmmaking-algorithm-documentaries-non-fiction-1235478174/.

²⁸ Brian Fung, *Mr. ChatGPT Goes to Washington: OpenAI CEO Sam Altman Testifies before Congress on AI Risks*, CNN (May 16, 2023), https://www.cnn.com/2023/05/16/tech/sam-altman-openai-congress/index.html; Riley Brennan, *The Race to Regulate: Congress Hints at How It Will Tackle Generative AI*, CORP. COUNS. (May 18, 2023), https://www.law.com/corpcounsel/2023/05/18/the-race-to-regulate-congress-hints-at-how-it-will-tackle-generative-ai/.

²⁹ OpenAI CEO Testifies on Artificial Intelligence, C-SPAN (May 16, 2023), https://www.c-span.org/video/?528117-1/openai-ceo-testifies-artificial-intelligence.

³⁰ Keach Hagey, Deepa Seetharaman & Berber Jin, *Behind the Scenes of Sam Altman's Showdown at OpenAi*, WALL St. J. (Nov. 22, 2023), https://www.wsj.com/tech/ai/altman-firing-openai-520a3a8c.

³¹ What Does Sam Altman's Firing – and Quick Reinstatement – Mean for the Future of AI?, ASSOCIATED PRESS (Nov. 22, 2023), https://apnews.com/article/openai-sam-altman-firing-saga-explained-51ae332acc18a41b51df5a39efa146d3.

responses, has fallen to voluntary guidelines given the paucity of formal, legislated, national, and supranational solutions. In the U.S., limited federal direction has been meted out in piecemeal fashion over the years,³² rather than as comprehensive, national legislation (with penalties for those who do not comply). With the U.S. government's laissez faire approach, patchwork of AI-related guidelines, and lack of legislative response, several states and municipalities³³ have stepped into the breach. Governmental authorities in the People's Republic of China (China or PRC), on the other hand, have provided some cohesive guidelines for their respective scientists, investors, universities, and corporations to develop and deploy AI tools.

Law and regulations are indeed required,³⁴ not just unenforceable guidelines, frameworks, best practices, or self-regulating standards.³⁵ There have been many calls around the world for governmental authorities to do something about AI creeping into our lives faster than we can navigate, let alone legislate against its dangers.³⁶ For some countries, a sector-specific approach is being piloted.³⁷ The premise is that AI in healthcare can be regulated differently than criminal justice matters. For other countries, a more comprehensive national policy³⁸—not related to any specific sector—has been

³² So too the "regulation by enforcement" approach appears to be occurring in the blockchain space. Richard Satran, *U.S. SEC Embraces 'Regulation by Enforcement' as Securities Industry Morphs Beyond Rulebooks*, REUTERS (Nov. 12, 2021), https://www.reuters.com/article/bc-finreg-sec-regulation-by-enforcement-idUSKBN2HX1OR/.

³³ Nathan Sheard, *Oakland's Progressive Fight to Protect Residents from Government Surveillance*, ELEC. FRONTIER FOUND. (Jan. 20, 2021), https://www.eff.org/deeplinks/2021/01/oaklands-progressive-fight-protect-residents-government-surveillance.

³⁴ *Cf.* James Cooper & Kashyap Kompella, *AI Regulation is Not a Silver Bullet*, THE HILL (June 5, 2023), https://thehill.com/opinion/technology/4034754-ai-regulation-is-not-a-silver-bullet/.

³⁵ Cf. George W. Schoenstein, Seize the Opportunity: Embrace Self-Regulation to Harness the Full Potential of AI, FORBES (July 20, 2023), https://www.forbes.com/sites/forbescommunicationscouncil/2023/07/20/seize-the-opportunity-embrace-self-regulation-to-harness-the-full-potential-of-ai/?sh=b5434b625056. See Tom Wheeler, Commentary, The Three Challenges of AI Regulation, BROOKINGS INST. (June 15, 2023), https://www.brookings.edu/articles/the-three-challenges-of-ai-regulation/.

³⁶ In May 2023, Microsoft President Brad Smith said "[g]overnment needs to move faster" to regulate AI. David McCabe, *Microsoft Calls for A.I. Rules to Minimize the Technology's Risks*, N.Y. TIMES (May 25, 2023), https://www.nytimes.com/2023/05/25/technology/microsoft-ai-rules-regulation.html.

³⁷ Ernst & Young Global Limited (EY), distinguishes between "sector-agnostic" and "sector-specific" regulation. EY Americas, *How to Navigate Global Trends in Artificial Intelligence Regulation*, ERNST & YOUNG GLOB. LTD. (Sept. 27, 2023), https://www.ey.com/en_us/ai/how-to-navigate-global-trends-in-artificial-intelligence-regulation.

³⁸ Alex Engler, *A Comprehensive and Distributed Approach to AI Regulation*, BROOKINGS INST. (Aug. 31, 2023), https://www.brookings.edu/articles/a-comprehensive-and-distributed-approach-to-ai-regulation/.

the approach of choice.

This Article explores the manner in which China and the U.S. are providing differing ethical guidelines and visions for the development and deployment of AI tools.³⁹ This is occurring as the economies of China and the U.S. decouple.⁴⁰ According to the Carnegie Endowment for International Peace:

A partial "decoupling" of U.S. and Chinese technology ecosystems is well underway. Beijing plays an active role in this process, as do other governments and private actors around the world. But the U.S. government has been a primary driver in recent years with its increased use of technology restrictions: export controls, divestment orders, licensing denials, visa bans, sanctions, tariffs, and the like. There is bipartisan support for at least some bolstering of U.S. tech controls, particularly for so-called strategic technologies, where Chinese advancement or influence could most threaten America's national security and economic interests.⁴¹

The U.S. enacted extensive export controls in October 2022 to keep semiconductor chips and chipmaking equipment out of China. China, in turn, has made it more difficult for U.S. firms to keep doing business in China. Bain & Company reported that "some companies are closing research and development (R&D) labs and other operations there, and setting up partnerships to sell and distribute products developed and made outside of the country." Fears of forced technology transfer and the lack of control over intellectual property (IP) rights a well as a general uptick in Chinese bureaucracy for foreign investment make these changes necessary for U.S.

³⁹ See generally STEFAN HEUMANN & NICHOLAS ZAHN, BENCHMARKING NATIONAL AI STRATEGIES 6-10 (Stiftung Neue Varantwortung 2018), https://www.stiftung-nv.de/sites/default/files/benchmarking ai strategies.pdf.

⁴⁰ Brendan Murray & Ramsey Al-Rikabi, *Why Prospect of US-China 'Decoupling' is Getting Serious*, BLOOMBERG (June 22, 2023), https://www.bloomberg.com/news/articles/2023-06-22/what-is-us-china-decoupling-and-how-is-it-happening. J. Stewart Black & Allen J. Morrison, *The Strategic Challenges of Decoupling*, HARV. BUS. REV. (May-June 2021), https://hbr.org/2021/05/the-strategic-challenges-of-decoupling.

⁴¹ JON BATEMAN, U.S.-CHINA TECHNOLOGICAL "DECOUPLING": A STRATEGY AND POLICY FRAMEWORK 1 (Carnegie Endowment for Int'l Peace 2022).

⁴² Alexandra Stevenson, *China is Full of Risks. So Why Can't Corporate America Leave?*, N.Y. TIMES (Sept. 8, 2023), https://www.nytimes.com/2023/09/08/business/china-us-business.html.

⁴³ DAVID CRAWFORD ET AL., TECHNOLOGY REPORT 2022: TECH COMPANIES EAT DISRUPTION FOR BREAKFAST 25 (Bain & Co. 2022).

⁴⁴ Off. of the U.S. Trade Representative, Update Concerning China's Acts, Policies and Practices Related to Technology Transfer, Intellectual Property, and Innovation 4, 22 (Exec. Off. of the President 2018).

corporations.⁴⁵ It is not just inside the U.S., but the campaign to restrict China's access to high tech components extends to U.S. trading partners.⁴⁶

Following this Introduction, Part II of this Article provides a very basic explanation of Artificial Intelligence. Part III of this Article explores the ways in which China has set up its own ethical guidelines and varied rules for the future development and use of Artificial Intelligence. The authorities in China have taken some leading steps in reigning in the use of AI for adults and even more so for children. Fart IV of this Article surveys the ways the U.S. government has regulated AI research and application. The U.S. has developed its own framework and blueprint for action, none of which has yet to be promulgated in legislation. These initiatives combine the ideas from industry, government agencies, research institutes, thinktanks, human rights watchdogs, and not-for-profit organizations. It is still a blueprint at the end of the day, aspirational rather than operational.

This Article concludes in Part V by exploring the importance of national AI guidelines on the ethical use of AI, ML, and like technology. Because this Article is written in the context of the great decoupling between China and the U.S., the European Union (EU) approach is left for another time. Likewise, this Article does not examine in depth the many other countries which have engaged in developing their own national strategies, ethical guidelines, and laws.⁵⁰ All these varying national developments beg the question whether an international agency should be founded to transnationally regulate AI research and implementation, an issue which is

⁴⁵ David Gura, *Economy: How High Tensions Between China and the U.S. are Impacting American Companies*, NAT'L PUB. RADIO (Aug. 26, 2023), https://www.npr.org/2023/08/26/1195711197/china-us-trade-tensions-commerce-secretary-gina-raimondo.

⁴⁶ Exececutive Order on Addressing United States Investments in Certain National Security Technologies and Products in Countries of Concern, White House (Aug. 9, 2023), https://www.whitehouse.gov/briefing-room/presidential-actions/2023/08/09/executive-order-on-addressing-united-states-investments-in-certain-national-security-technologies-and-products-in-countries-of-concern/.

⁴⁷ Yan Zhuang & Siyi Zhao, *China Wants Children to Spend Less Time on Their Smartphones*, N.Y. TIMES (Aug. 4, 2023), https://www.nytimes.com/2023/08/04/business/china-smartphone-minor-mode.html.

⁴⁸ *Technical AI Standards*, Nat'l Inst. Standards & Tech. (updated May 4, 2023), https://www.nist.gov/artificial-intelligence/technical-ai-standards.

⁴⁹ OLAF J. GROTH, MARK NITZBERG & DAN ZEHR, COMPARISON OF NATIONAL STRATEGIES TO PROMOTE ARTIFICIAL INTELLIGENCE 12 (Konrad Adenauer Stiftung ed., 2019), https://www.kas.de/documents.

⁵⁰ Chapter 7: AI Policy and National Strategies, in STANFORD UNIVERSITY, ARTIFICIAL INTELLIGENCE INDEX REPORT 2021, at 4 (2021) https://aiindex.stanford.edu/wp-content/uploads/2021/03/2021-AI-Index-Report_Chapter-7.pdf ("Since Canada published the world's first national AI strategy in 2017, more than 30 other countries and regions have published similar documents as of December 2020."); *id*.

also explored in Part V, the Conclusion, of this Article.

The broad spectrum of differing approaches to regulation of the AI industry provides a great opportunity to apply the comparativist's lens.⁵¹ Professor John C. Reitz has written:

Comparison starts by identifying the similarities and differences between legal systems or parts of legal systems under comparison. However, in performing the basic comparative job of identifying similarities and differences, one has to consider the scope of comparison: What is going to be compared with what? Here the comparatist comes face to face with the enigma of translation.⁵²

Comparative law requires us to acknowledge the differences among legal systems.⁵³ This inquiry goes beyond the classic "beauty contest" asking which system is better, a practice sometimes confined to the common law or civil law tradition.⁵⁴ But, here the competing "standard" comes from the PRC,⁵⁵ a jurisdiction that is based on scientific socialism and controlled by the Chinese Communist Party (CCP).⁵⁶

While this Article is not about the rule of law in China,⁵⁷ there has been

Since New China was founded, and particularly since the policy of reform and opening up was introduced in 1978, China has made remarkable achievements in its legislation work. By the end of August 2011, the Chinese legislature had enacted 240 effective laws including the current Constitution, 706 administrative regulations, and over 8,600 local regulations. As a result, all legal branches have been set up, covering all aspects of social relations; basic and major laws of each branch have been made; related administrative regulations and local regulations are fairly complete; and the whole legal system is scientific and consistent. A socialist system of laws with Chinese characteristics has been solidly put into place.

INFO. OFF. OF THE STATE COUNCIL, THE SOCIALIST SYSTEM OF LAWS WITH CHINESE CHARACTERISTICS 5 (ed. Shen 2011), http://www.npc.gov.cn/englishnpc/c2759/c2761/201905/t20190523 382655.html.

⁵¹ John C. Reitz, *How to Do Comparative Law*, 46 Am. J. COMPAR. L. 617, 620 (1998).

⁵² Id.

⁵³ Alan Watson, *Legal Change: Sources of Law and Legal Culture*, 131 UNIV. PA. L. REV. 1121, 1122 (1983).

⁵⁴ Richard B. Cappalli, *At the Point of Decision: The Common Law's Advantage over the Civil Law*, 12 Temp. Int'l & Comp. L.J. 87, 92-97 (1998); John Henry Merryman, *On the Convergence (and Divergence) of the Civil Law and the Common Law*, 17 Stan. J. Int'l L. 357, 381 (1981).

⁵⁵ Matt Sheehan, Analysis, *What the U.S. Can Learn From China About Regulating AI*, FOREIGN POL'Y (Sept. 12, 2023), https://foreignpolicy.com/2023/09/12/ai-artificial-intelligence-regulation-law-china-us-schumer-congress/.

⁵⁶ Nongji Zhang, *People's Republic of China Legal Research*, HARV. L. SCH. LIBR. (last updated Apr. 6, 2023), https://guides.library.harvard.edu/ChineseLegalResearch.

⁵⁷ See generally Jerome A. Cohen, "Rule of Law" with Chinese Characteristics: Evolution and Manipulation, 19 INT'L J. OF CONST. L. 1882 (2021).

much written about the role of guidelines and policy initiatives and their role in providing normative foundations in China.⁵⁸ There is a hierarchy of laws in China,⁵⁹ but guidelines, measures, and principles⁶⁰ as well as governmental and Ministerial statements are also important.⁶¹ Viktar Fedaseyeu and Adam Yu have explained:

Because Chinese regulators by and large strive to promote economic growth, the interplay between China's implicit and explicit regulations follows a predictable pattern. Initially, innovation (including financial innovation) is often allowed to develop with few if any explicit rules. If and when signs of misbehavior appear, regulators step in by providing

At the first central conference on law-based governance in November last year, General Secretary of the Communist Party of China Central Committee Xi Jinping said that China should explore a legal path derived from its practice of revolution, construction and reform. He also said that the law in China should embody the excellence of traditional Chinese legal culture and draw lessons from beneficial legal achievements from abroad.

Zhang Li, Creating Rule of Law with Chinese Characteristics, CHINA DAILY (Dec. 12, 2021), https://www.chinadaily.com.cn/a/202112/03/WS61a9552da310cdd39bc79091.html.

- ⁵⁸ Zhong Zhang, Ruling the Country without Law: The Insoluble Dilemma of Transforming China into a Law-Governed Country, 17 ASIAN J. OF COMPAR. L. 198 (2022).
- ⁵⁹ The People's Republic of China, *China's Legal System*, CHINA GOV'T WEBSITE (Aug. 25, 2014), https://english.www.gov.cn/archive/china_abc/2014/08/23/content_281474982987 244.htm; Zhao Ying, *A Brief Guide to the Legal System of China*, DAILY FIN. TIMES (June 21, 2018), https://www.ft.lk/columns/A-brief-guide-to-the-legal-system-of-China/4-657550; Benjamin van Rooij & Annemaike van den Dool, *Lawmaking in China: Understanding Substantive and Procedural Changes*, 1 CHINA L. & SOC. REV. 5 (2016), https://www.researchgate.net/publication/318177653_Lawmaking_in_China_Understanding_Substantive_and_Procedural_Changes.
- ⁶⁰ As an example, in 2019, China's State Council released new morality guidelines to instruct Chinese citizens on nationalism and the citizen's duty to national rejuvenation. *Outline for Implementing the Moral Construction of Citizens in the New Era*, CHINA GOV'T WEBSITE (Oct. 27, 2019), https://www.gov.cn/zhengce/2019-10/27/content_5445556.htm. The Outline for Implementing the Moral Construction of Citizens in the New Era was crafted around President Xi Jinping's political philosophy. While there were no penalties provided, the guidelines were designed to define good behavior with a view to becoming model citizens in China. Eric Cheung, 'Inherit the Red Gene': China Issues Xi-Focused Morality Guidelines, CNN (Oct. 30, 2019), https://www.cnn.com/2019/10/30/asia/china-morality-xi-jinping-intl-hnk/index.html. While there were no penalties provided, the guidelines were designed to define good behavior with a view to becoming model citizens in China. Some of these thoughts were incorporated into the 2017 reworking on the Chinese Constitution. XIANFA (2017) (China).
- ⁶¹ Zhou Xin, China Should Rely on Rule of Law, Instead of Flimsy Political Promises, to Spur Growth in Nation's Private Sector Economy, S. CHINA MORNING POST (Dec. 5, 2023), https://www.scmp.com/business/china-business/article/3243783/china-should-rely-rule-law-instead-flimsy-political-promises-spur-growth-nations-private-sector ("Even though the great majority of China's private entrepreneurs will put faith in the government's promises, there is growing awareness about the fickleness of short-term policies.").

implicit guidance rather than issuing explicit rules. If implicit guidance is insufficient to rein in the excesses that government officials are concerned about, explicit (and often strict) regulations follow.⁶²

The lack of transparency of implicit regulations may make a full comparison a little difficult. Nonetheless, Professor Reitz has explained that "[a]ctually framing the comparison makes one think hard about each legal system being compared and about the precise ways in which they are similar or different."63 As this Article unpacks, there is plenty of technology nationalism in both camps⁶⁴ not only in pursuing policies to make one's national AI industry the hegemon in the space, but also in the regulation of the space itself. There are, however, many differences including standards for privacy⁶⁵ and national security.⁶⁶ Permissions for AI research and deployment are opaque in China. Permissions in the U.S. are not necessary. One can starkly view the difference between the PRC's command economy, national plan driven strategy and the free market, industry-driven, reactive response to AI of the United States.⁶⁷ The PRC has rolled out a number of guidelines concerning AI research and deployment.⁶⁸ In contrast, there has been a very public, and slightly haphazard start towards regulation in the U.S., 69 which is part of its non-interventionist market-based approach. In short, in the U.S. there is very little scrutiny of the various uses of Artificial Intelligence. 70 But that may change given the changing technological and

⁶² Viktar Fedaseyeu & Adam Yu, *How to Read China's Unwritten Rules and Regulations*, DIPLOMAT (Oct. 3, 2022), https://thediplomat.com/2022/10/how-to-read-chinas-unwritten-rules-and-regulations/.

⁶³ Reitz, *supra* note 51, at 618-19.

⁶⁴ Trade and Technology: Techno-Nationalism and Its Impact on Geopolitics and Trade, HINRICH FOUND. (Feb. 21, 2023), https://www.hinrichfoundation.com/research/article/tech/techno-nationalism-impact-on-geopolitics-and-trade/.

⁶⁵ James Cooper, *A Case For Digital Sovereignty: Control Over Personal Data Empowers Individuals*, INT'L BUS. TIMES (Dec. 26, 2018), https://www.ibtimes.com/case-digital-sovereignty-control-over-personal-data-empowers-individuals-2745832.

⁶⁶ National Intelligence Law of the People's Republic of China, (June 27, 2017, rev'd Apr. 27, 2018), art. 7, 2018 P.R.C. LAWS. *See* Xiao Qiang, *President Xi's Surveillance State*, 30 J. DEMOCRACY 53 (2019); Peter Mattis, *Everything We Know about China's Secretive State Security Bureau*, NAT'L INT. (July 9, 2017), https://nationalinterest.org/feature/everything-we-know-about-chinas-secretive-state-security-21459.

⁶⁷ Rishi Iyengar, *Who is Winning the AI Race? It's Not That Simple*, FOREIGN POL'Y (Mar. 27, 2023), https://foreignpolicy.com/2023/03/27/us-china-ai-competition-cooperation/.

⁶⁸ See infra Part III.

⁶⁹ See infra Part IV. Laurie A. Harris, Cong. Rsch. Serv., R47644, Artificial Intelligence: Overview, Recent Advances and Considerations for the 118th Congress (2023) [hereinafter Considerations for the 118th Congress].

⁷⁰ Ruth Reader, AI is Driving Google's Health Care Business. Washington Doesn't Know What to Do About It, POLITICO (Dec. 4, 2023), https://www.politico.com/news/

geopolitical landscape.

II. ARTIFICIAL INTELLIGENCE 101

AI is a major area for future technology development, a promised source of economic wealth and the tool by which countries will gain geopolitical influence.⁷¹ The term AI can indicate machine-based systems that have differing degrees of autonomy, which, with a given set of human-defined objectives, provide predictions and recommendations or can make decisions using data.⁷² Under U.S. law, "[t]he term 'artificial intelligence' means a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations or decisions influencing real or virtual environments."⁷³ For AI visionary Chinese investor, Kai-Fu Lee:

Machine learning—the umbrella term for the field that includes deep learning—is a history-altering technology but one that is lucky to have survived a tumultuous half-century of research. Ever since its inception, artificial intelligence has undergone a number of boom-and-bust cycles. Periods of great promise have been followed by "AI winters," when a disappointing lack of practical results led to major cuts in funding.⁷⁴

The overarching idea for AI is that it incorporates human intelligence to machines.⁷⁵ ML is a subset of AI and deep learning is a subset of machine learning.⁷⁶ ML is the concept of creating smart intelligent machines.⁷⁷ ML involves computer algorithms that have the ability to learn or improve in performance over time on some tasks.⁷⁸ Deep learning (DL) is a subset of

^{2023/12/04/}google-washington-ai-health-00129962.

⁷¹ Jayshree Pandya, *The Geopolitics of Artificial Intelligence*, FORBES (Jan. 28, 2019), https://www.forbes.com/sites/cognitiveworld/2019/01/28/the-geopolitics-of-artificial-intelligence/?sh=3ad50fad79e1.

⁷² DEPT. ENTER., TRADE & EMP., GOV'T OF IRELAND, AI – HERE FOR GOOD, A NATIONAL ARTIFICIAL INTELLIGENCE STRATEGY FOR IRELAND – EXECUTIVE SUMMARY 3 (2021) [hereinafter GOV'T OF IRELAND, AI EXEC. SUMMARY].

⁷³ William M. (Mac) Thornberry National Defense Authorization Act, H.R. 6395, 116th Cong. § 5002(3) (2020).

 $^{^{74}}$ Kai-Fu Lee, AI Superpowers: China, Silicon Valley, and the New World Order 6-7 (2018).

⁷⁵ Michael J. Garbade, *Clearing the Confusion: AI vs Machine Learning vs Deep Learning Differences*, Towards Data Sci. (Sept. 14, 2018), https://towardsdatascience.com/clearing-the-confusion-ai-vs-machine-learning-vs-deep-learning-differences-fce69b21d5eb.

⁷⁶ IBM Data and AI Team, *AI vs. Machine Learning vs. Deep Learning vs. Neural Networks: What's the Difference?*, IBM (July 6, 2023), https://www.ibm.com/blog/ai-vs-machine-learning-vs-deep-learning-vs-neural-networks/. *See generally* LAURIE A. HARRIS, CONG. RSCH. SERV., IF10608, OVERVIEW OF ARTIFICIAL INTELLIGENCE 1 (2017).

 $^{^{77}}$ Harry Surden, $\it Machine Learning and Law, 89$ Wash. L. Rev. 87, 88 (2014).

⁷⁸ *Id*.

ML that uses vast volumes of data and complex algorithms to train a model. ⁷⁹ DL uses artificial neural networks which receive inputs and produce output. ⁸⁰ DL can be used with supervised or unsupervised systems, but deep learning is more sophisticated than other forms of Artificial Intelligence. ⁸¹

AI has been led by scientists and futurists in the West–primarily the U.S.– for decades. Indeed, for Kai-Fu Lee, "the story of the birth of deep learning (DL) took place almost entirely in the U.S., Canada and the United Kingdom." However, over the last decade, the power over AI, DL and ML has been shifting to China. According to Kai-Fu Lee:

Chinese AI companies and researchers have already made up enormous ground on their American counterparts, experimenting with innovative algorithms and business models that promise to revolutionize China's economy. Together, these businesses and scholars have turned China into a bona fide AI superpower, the only true national counterweight to the United States in this emerging technology. How these two countries choose to compete and cooperate in AI will have dramatic implications for global economics and governance.⁸⁴

Other analysts believe that China may not be winning the AI race, but it may be winning the regulation of AI race. 85 Bill Drexel and Hannah Kelly have explained: "Rather than competing with the West to write the rules of the road for AI, Beijing is instead building the road itself, working with allies and client nations to construct Chinese-built AI ecosystems that could pose global risks if they take root and expand." 86

⁷⁹ See generally Deep Learning vs. Machine Learning: Beginner's Guide, COURSERA (June 15, 2023), https://www.coursera.org/articles/ai-vs-deep-learning-vs-machine-learning-beginners-guide. See also Shruti Mohan, AI vs Machine Learning vs Deep Learning: Know the Differences, SIMPLILEARN (Feb. 23, 2023), https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/ai-vs-machine-learning-vs-deep-learning.

⁸⁰ Barry Solaiman, Addressing Access with Artificial Intelligence: Overcoming the Limitations of Deep Learning to Broaden Remote Care Today, 51 U. MEM. L. REV. 1103, 1109 (2021). ⁸¹ Id.

⁸² LEE, *supra* note 74, at 95.

⁸³ Gregory S. Dawson & Kevin C. Desouza, *How the U.S. Can Dominate in the Race to National AI Supremacy*, BROOKINGS INST. (Feb. 3, 2022), https://www.brookings.edu/blog/techtank/2022/02/03/how-the-u-s-can-dominate-in-the-race-to-national-ai-supremacy/. *See* Dennis Nguyen & Erik Hekman, *A 'New Arms Race'? Framing China and the U.S.A. in A.I. News Reporting: A Comparative Analysis of the Washington Post and South China Morning Post*, 7 GLOB. MEDIA CHINA 58, 58 (2022).

⁸⁴ Lee, *supra* note 74, at x.

⁸⁵ James Cooper & Kashyap Kompella, No, China is Not Winning the AI Race, THE HILL (Feb. 3, 2022), https://thehill.com/opinion/technology/592270-no-china-is-not-winning-the-ai-race?rl=1.

⁸⁶ Bill Drexel & Hannah Kelly, Opinion, *Behind China's Plans to Build AI for the World*, POLITICO (Nov. 30, 2023), https://www.politico.com/news/magazine/2023/11/30/china-

Indeed, the Beijing Principles and other guidelines and measures that have emerged from the PRC have weight and reach. And while not a formal law, it is a consensus policy document emerging from top tier research universities, first in class corporations that are in part state owned entities, and governmental authorities. The next Part of this Article explores the different attempts at guidelines on ethics for AI that have emerged out of China in the race for global domination of this massively disruptive technology.

III. THE APPROACH OF THE PEOPLE'S REPUBLIC OF CHINA

It is no secret that China views AI as a strategically important industry to dominate going forward.⁸⁷ The Chinese government has deemed AI a strategic technology to assist China meet its economic and geopolitical goals. As such, China has promoted many different initiatives to promote AI, including "Made in China 2025," "Action Outline for Promoting the Development of Big Data," and "Next Generation Artificial Intelligence Development Plan." In its 13th five-year plan, dated March 2016, the Central Committee of the CCP, lists AI as one of the six critical areas for developing the country's emerging industries.⁸⁹

In 2016, China's development efforts intensified. 90 In 2016, a Google system powered by AI beat Lee Sodol, an 18-time Go world champion, in a game of Go. 91 This occurred in front of a largely Chinese audience and plunged China into an "artificial intelligence fever." Since 2016, China has continued to advance in the world of AI development. 93 In 2021, China led the world in the number of AI journals, conferences, and publications. 94

global-ai-plans-00129160.

⁸⁷ James McBride & Andrew Chatzky, *Is 'Made in China 2025' a Threat to Global Trade?* COUNCIL ON FOREIGN RELS. (May 13, 2019), https://www.cfr.org/backgrounder/made-china-2025-threat-global-trade.

⁸⁸ Daitian Li, Tony W. Tong & Yangao Xiao, *Is China Emerging as the Global Leader in Al?*, HARV. Bus. Rev. (Feb. 18, 2021), https://hbr.org/2021/02/is-china-emerging-as-the-global-leader-in-ai.

⁸⁹ CENT. COMM. OF THE COMMUNIST PARTY OF CHINA, THE 13TH FIVE YEAR PLAN FOR ECONOMIC AND SOCIAL DEVELOPMENT OF THE PEOPLE'S REPUBLIC OF CHINA 66 (Compilation & Translation Bureau trans. 2016).

⁹⁰ Ryan Hass & Zach Ballin, *US-China Relations in the Age of Artificial Intelligence*, BROOKINGS INST. (Jan. 10, 2019), https://www.brookings.edu/research/us-china-relations-in-the-age-of-artificial-intelligence/.

⁹¹ *Id*.

⁹² Id.

⁹³ See generally Daniel Zhang et al., The AI Index 2022 Annual Report (Stanford Inst. for Human-Centered AI ed., Mar. 2022). See also Hass & Ballin, supra note 90.

⁹⁴ ZHANG, *supra* note 93, at 10.

However, China has more patent applications than those granted. 95 By 2017,

the Chinese central government issued an ambitious plan to build artificial intelligence capabilities. It called for greater funding, policy support, and national coordination for AI development. It set clear benchmarks for progress by 2020 and 2024, and it projected that by 2030 China would become the center of global innovation in artificial intelligence, leading in theory, technology, and application. By 2017, Chinese venture-capital investors had already responded to that call, pouring record sums into artificial intelligence startups and making up 48 percent of all AI venture funding globally, surpassing the United States for the first time. 96

In July 2017, China's State Council released the country's strategy for AI development in a document titled "New Generation Artificial Intelligence Development Plan" (AIDP or in Chinese, 新一代人工智能发展规划).⁹⁷ China's goal was to become the world leader in AI by 2030. It would do so by pouring a trillion yuan (around \$US150 billion at the time) into the AI industry.⁹⁸ Part of the July 2017 strategy released by China's State Council stated that the PRC would also prove its leadership in AI by defining ethical norms and standards for Artificial Intelligence.⁹⁹

A detailed set of key performance indicators that are part of the CCP's strategic initiatives were enshrined into law. 100 Investment followed. 101 According to Peter Frankopan, the central government in Beijing is "pouring money and resources into artificial intelligence," and "building new technology parks across the country." 102 Much investment from the Chinese

⁹⁵ Id. at 39.

⁹⁶ LEE, *supra* note 74, at 4.

⁹⁷ Huw Roberts et al., *The Chinese Approach to Artificial Intelligence: An Analysis of Policy, Ethics, and Regulation,* 36 AI & SOCIETY 59, 60 (June 17, 2020), https://doi.org/10.1007/s00146-020-00992-2.

⁹⁸ *Id*.

⁹⁹ Id.

¹⁰⁰ Guo Wu Yuan (国务院) [PRC STATE COUNCIL], Guan Yu Yin Fa《 Zhong Guo Zhi Zao 2025》De Tong Zhi (國務院關於印發《中國製造 2025》的通知) 国务院关于印发《中国制造2025》的通知 [Notice of the State Council on Printing and Distributing "Made in China 2025"] (May 8, 2015), http://www.gov.cn/zhengce/content/2015-05/19/content_9784.htm.

¹⁰¹ Graham Webster et al., *Full Translation: China's 'New Generation Artificial Intelligence Development Plan'* (2017), DIGICHINA (Stanford University ed., Aug. 1, 2017), https://digichina.stanford.edu/work/full-translation-chinas-new-generation-artificial-intelligence-development-plan-2017/. *See also* Ngor Luong & Margarita Konaev, *In & Out of China: Financial Support for AI Development*, CTR. SEC. EMERGING TECH. (Aug. 10, 2023), https://cset.georgetown.edu/article/in-out-of-china-financial-support-for-ai-development/.

 $^{^{102}}$ Peter Frankopan, The New Silk Roads: The Present and Future of the World 200

government has flowed to state-owned enterprises and a host of start-ups and technology companies. ¹⁰³ For Kai-Fu Lee:

Silicon Valley looks downright sluggish compared to its competitor across the Pacific. China's successful internet entrepreneurs have risen to where they are by conquering the most cutthroat competitive environment on the planet. They live in a world where speed is essential, copying is an accepted practice, and competitors will stop at nothing to win a new market. Every day spent in China's startup scene is a trial by fire, like a day spent as a gladiator in the Coliseum. The battle are life or death, and your opponents have no scruples. 104

It is no surprise that such a funding frenzy originally resulted in a low bar when it came to ethics. Enter the AI ethicists with Chinese characteristics. As a result, the Beijing Academy of Artificial Intelligence (BAAI), an organization that is supported by the Chinese Ministry of Science and Technology as well as the Beijing municipal government, released the Beijing AI Principles on May 25, 2019. This set of guidelines has been the most robust AI regulation coming out of China. The seven governance principles include: harmony and friendliness; fairness and justice; inclusivity and sharing; respect privacy; secure/safe and controllable; shared responsibility; open collaboration; and agile governance. This code of behavior was developed by many of the prominent technology research institutions including Tsinghua University and Peking University and the country's biggest technology behemoths including Alibaba, Baidu, and Tencent. 108

The Beijing AI Principles set the basic foundations for the Al development,

⁽Alfred A. Knopf ed., Penguin Books 2019).

¹⁰³ Paul Mozur, *Beijing Wants A.I. to Be Made in China by 2030*, N.Y. TIMES (July 20, 2017), https://www.nytimes.com/2017/07/20/business/china-artificial-intelligence.html.

¹⁰⁴ LEE, *supra* note 74, at 15.

¹⁰⁵ Beijing AI Principles, JOURNALISMAI (May 25, 2019) https://journalismai.com/2019/05/25/beijing-ai-principles-beijing-academy-of-artificial-intelligence-2019/; Will Knight, Why does Beijing Suddenly Care about AI Ethics?, MIT TECH. REV. (May 31, 2019), https://www.technologyreview.com/s/613610/why-does-china-suddenly-care-about-ai-ethics-and-privacy/.

¹⁰⁶ See Bruce Sterling, The Beijing Artificial Intelligence Principles, WIRED (June 1, 2019), https://www.wired.com/beyond-the-beyond/2019/06/beijing-artificial-intelligence-principles/. See also Beijing AI Principles, SPRINGER (Aug. 23, 2019), https://link.springer.com/content/pdf/10.1007/s11623-019-1183-6.pdf.

¹⁰⁷ Lorand Laskai & Graham Webster, *Translation: Chinese Expert Group Offers* 'Governance Principles' for 'Responsible AI', New Am. (June 17, 2019), https://perma.cc/V9FL-H6J7.

¹⁰⁸ See Knight, supra note 105.

including being ethical, diverse and inclusive, and responsible. ¹⁰⁹ The Beijing AI Principles are divided into three parts: the research and development of AI, the use of AI and the governance of Artificial Intelligence. The Beijing AI Principles aims to bring harmony between humans and machines. ¹¹⁰ It highlights terms including privacy, dignity, freedom, autonomy, and rights, while also providing guidance for the use and governance of AI including avoiding a malicious AI race, continuous research, and the monitoring of risks. ¹¹¹

The first parts of the Beijing AI Principles are research and development. This principle holds that creators should observe the following principles when creating AI products: do good; should serve humanity and conform to the interests of humankind; be responsible; control the risks of AI systems; should take ethical design approaches; be diverse and inclusive; and should open platforms to avoid monopolies and should share the benefits of Artificial Intelligence. This call against monopolies is ironic given that the largest monopoly in the PRC is the Chinese Communist Party.

The second part of the Beijing AI Principles relates to the use of Artificial Intelligence. AI should be used wisely and properly, ensuring informed consent, and incorporating education and training for stakeholders. The third and final part of the Beijing AI Principles is the governance of Artificial Intelligence. The governance of AI should observe the following principles: optimizing employment; harmony and cooperation; adaptation and moderation; and subdivision and implementation. Optimizing employment recognizes that there should be an inclusive and cautious attitude towards the impact of AI on employment. Full employment is a preoccupation for the Chinese government and the legitimacy of the Chinese

¹⁰⁹ Laskai & Webster, supra note 107.

¹¹⁰ Rebecca Arcesati, *Lofty Principles, Conflicting Interests: AI Ethics and Governance in China*, MERCATOR INST. FOR CHINA STUD. (June 24, 2021), https://merics.org/en/report/lofty-principles-conflicting-incentives-ai-ethics-and-governance-china. *See also* Knight, *supra* note 105; ANGELA DALY ET AL., *AI, Governance and Ethics, in* CONSTITUTIONAL CHALLENGES IN THE ALGORITHMIC SOCIETY 182-201 (Hans-W. Micklitz et al. eds., 2021).

¹¹¹ Jessica Cussins Newman, *AI Principles in Context*, ASIA Soc'Y 6 (Aug. 20, 2020), https://asiasociety.org/sites/default/files/inline-files/Cussins Principles Final.pdf.

¹¹² Sterling, supra note 106.

¹¹³ Id.

¹¹⁴ Lindsay Maizland & Eleanor Albert, *The Chinese Communist Party*, COUNCIL ON FOREIGN RELS. (Oct. 6, 2022), https://www.cfr.org/backgrounder/chinese-communist-party.

¹¹⁵ Sterling, supra note 106.

¹¹⁶ *Id*.

¹¹⁷ Id.

¹¹⁸ Id.

¹¹⁹ *Id*.

Communist Party.¹²⁰ Harmony and cooperation includes the cooperation to actively establish an interdisciplinary and comprehensive AI governance ecosystem.¹²¹ Additionally, creators should avoid malicious AI races.¹²² There is also a call for adaptation and moderation so that revisions to AI principles and policies are beneficial to society and nature.¹²³ Finally, subdivision and implementation includes the promotion of principles and continuous research on the risks of Artificial Intelligence.¹²⁴

Some AI scientists are worried about the vulnerability of children when it comes to advancing Artificial Intelligence. On September 14, 2020, the BAAI released the "Beijing Consensus on Artificial Intelligence for Children." The Consensus is China's first set of principles for the development of AI for children. The Beijing Consensus on Artificial Intelligence for Children" emphasizes child centeredness, protection of the rights of children and improvement of policy and regulatory mechanisms. In it, four main themes are covered: Children-centered values, protecting children's rights, taking responsibilities and multi-stakeholder governance. These themes include further nineteen detailed principles including dignity, fairness, child first, protection of privacy and inclusion of the will of children and so forth. In order to give a globalized context to these principles, this Consensus provides that the definition of "children," description of values, and children's rights all track those provided in the 1989 United Nations Convention on the Rights of the Child.

As China's abilities in the AI world continue, 129 new rules are released by

¹²⁰ XI JINPING, REPORT TO 20TH NATIONAL CONGRESS OF COMMUNIST PARTY OF CHINA (Oct. 16, 2022), http://my.china-embassy.gov.cn/eng/zgxw/202210/t20221026_10792358.htm.

¹²¹ Sterling, supra note 106.

¹²² *Id*.

¹²³ *Id*

¹²⁴ Id.

¹²⁵ Ammar Younas, *Artificial intelligence for Children: Beijing Principles Released*, FOREIGN POL'Y NEWS (Sept. 15, 2020), https://foreignpolicynews.org/2020/09/15/artificial-intelligence-for-children-beijing-principles-released/.

¹²⁶ Ammar Younas, Beijing Consensus of Artificial Intelligence for Children: An Effort to Prevent Juvenile Delinquency, Soc. Sci. Rsch Network (Sept. 19, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3695631.

¹²⁷ Zheng Jinwu (郑金武), "Mian Xiang er Tong de Ren Gong Zhi Neng Bei Jing Gong Shi" Fa Bu (《面向儿童的人工智能北京共识》发布) ["Beijing Consensus on Artificial Intelligence for Children" Released], SCIENCENET.CN (Sept. 15, 2020), http://news.sciencenet.cn/htmlnews/2020/9/445607.shtm.

¹²⁸ *Id. See generally* United Nations Convention on the Rights of the Child, Nov. 20, 1989, 1577 U.N.T.S. 3, 28 I.L.M. 1448 (entered into force Sept. 2, 1990).

¹²⁹ Hua Ling (华凌), Quan Qiu Zui da Zhi Neng Mo Xing "Wu Dao 2.0" Zai Jing Fa Bu (全球最大智能模型《悟道2.0》 在京发布) [The World's Largest Intelligent Model "Enlightenment 2.0" was Released in Beijing], Keji Ribao (科技日报) [SCI. & TECH. DAILY]

the Chinese government. An example is the new algorithm law which came into force in 2022. Since January 2022, China also has been subject to a law similar to the General Data Protection Regulation (GDPR) of the EU, similar to the toughest privacy and security law in the world. China has also been quick to regulate generative AI, by attempting to impose measures like prior government approval before the release of any ChatGPT-like products. Since January 2022, China also has been subject to a law similar to the GPT-like prior government approval before the release of any ChatGPT-like products. Since January 2022, China also has been subject to a law similar to the GPT-like prior government approval before the release of any ChatGPT-like products.

On July 10, 2023, the Cyberspace Administration of the PRC released its "Interim Measures for the Management of Generative Artificial Intelligence Services." In it, Chinese authorities provided its rules to regulate those who provide generative AI capabilities to the public in China. Much of this law focuses on traditional AI safety measures like protections for intellectual property, and provisions to ensure transparency and prevent discrimination. Other sections, however, are particular to the Chinese context, like the adherence to the values of socialism and the prohibition of incitement against the State. After all, generative AI tests state control outside the scope of risk that comes with the Internet. As a result, to provide generative AI services to the public, Chinese firms have to obtain a government license. Moreover, if these firms use public opinion attributes or social mobilization capabilities in the model on which the AI tool trains, the firm must submit a security assessment. Generative AI providers must protect state power, safeguard national unity, and avoid inciting secession. The development of AI tools

⁽June 1, 2021), http://digitalpaper.stdaily.com/http_www.kjrb.com/kjrb/html/2021-06/02/content 468929.htm?div=-1.

¹³⁰ Tracy Qu, *China's Algorithm Law Takes Effect to Curb Big Tech's Sway in Public Opinion*, S. CHINA MORNING POST (Mar. 1, 2022), https://www.scmp.com/tech/policy/article/3168816/chinas-algorithm-law-takes-effect-curb-big-techs-sway-public-opinion.

¹³¹ Dora Luo & Yanchen Wang, *China: Data Protection Overview*, ONETRUST DATAGUIDANCE (Oct. 2023), https://www.dataguidance.com/notes/china-data-protection-overview.

Ben Wolford, What is GDPR, the EU's New Data Protection Law?, PROTON, https://gdpr.eu/what-is-gdpr/ (last visited Nov. 20, 2023).

¹³³ Seaton Huang, et al., *Translation: Measures for the Management of Generative Artificial Intelligence Services (Draft for Comment) – April 2023*, DIGICHINA (Apr. 11, 2023), https://digichina.stanford.edu/work/translation-measures-for-the-management-of-generative-artificial-intelligence-services-draft-for-comment-april-2023/.

¹³⁴ Sheng Cheng Shi Ren Gong Zhi Neng Fu Wu Guan Li Zan Xing Ban Fa (生成式人工智能服务管理暂行办法) [Interim Measures for Generative Artificial Intelligence Service Management], Zhong Yang Wang Luo An Quan He Xin Xi Hua Wei Yuan Hui Ban Gong Shi (中央网络安全和信息化委员会办公室) [OFF. OF THE CENT. CYBERSPACE AFFS. COMM'N OF THE CYBERSPACE ADMIN.] (July 13, 2023), http://www.cac.gov.cn/2023-07/13/c_1690898327029107.htm; Arjun Kharpal, China Finalizes First-of-its-Kind Rules Governing Generative A.I. Services like ChatGPT, CNBC (July 13, 2023), https://www.cnbc.com/2023/07/13/china-introduces-rules-governing-generative-ai-services-like-chatgpt.html.

must preserve economic and social order and be aligned with China's socialist values.

China continues its work to realize the strategic manufacturing goals of the country's Made in China 2025 policy. 135 This initiative dates back to May 8, 2015 when the State Council of the PRC launched the "Made in China 2025" initiative, with a view to transform China from the world's workshop based on quantity to a manufacturer of quality. 136 China has indeed achieved much progress, becoming a leader in a number of significant worldwide technology industries. 137 Chinese authorities have backed state-owned enterprises 138 to grow into national champions and international behemoths, enabling them to directly compete with big technology companies from the West in many strategic industries of the future such as 5G, autonomous vehicles, blockchain, semi-conductor chips, and robotics. 139 At a State Council Executive Meeting in 2017, Premier Li Keqiang emphasized that "[the Chinese] must give full play to the role of innovation in spurring entrepreneurship and employment, and speed up the transformation of innovation into real productivity." 140

China is also integrating its AI tools into its Belt and Road Initiative¹⁴¹ (also known as the "One Belt One Road Initiative"), the "developmental strategy promoted by the [PRC] to foster mercantile connectivity and cooperation among countries."¹⁴²

¹³⁵ Zhong Guo Zhi Zao (中国制造 2025) [INT'L CENT. FOR TECH., MADE IN CHINA 2025] 7-8 (IoTOne ed., July 7, 2015), http://www.cittadellascienza.it/cina/wp-content/uploads/2017/02/IoT-ONE-Made-in-China-2025.pdf.

¹³⁶ GUO WU YUAN (国务院) [PRC STATE COUNCIL], GUO WU YUAN GUAN YU YIN FA 《ZHONG GUO ZHI ZAO 2025》DE TONG ZHI (國務院關於印發《中國製造 2025》的通知) [NOTICE OF THE STATE COUNCIL ON PRINTING AND DISTRIBUTING "MADE IN CHINA 2025"] 8 (Ben Murphy ed., Etcetera Language Grp., Inc. trans. 2022) (2015) ("To achieve the strategic goal of a manufacturing powerhouse, we must persist in being problem-oriented, make overall plans, and focus on key points. We must build a consensus throughout the whole of society, accelerate the transformation and upgrading of the manufacturing industry, and comprehensively improve the quality of development and our core competitiveness.").

¹³⁷ Jamie Gaida et al., ASPI's Critical Technology Tracker: The Global Race for Future Power No. 69, at 1 (2023).

¹³⁸ See generally Mark McLaughlin, State-Owned Enterprises and Threats to National Security Under Investment Treaties, 19 CHINESE J. INT'L L. 283-84 (2020).

¹³⁹ Scott Kennedy, *Made in China 2025*, CTR. FOR STRATEGIC & INT'L STUD. (June 1, 2015), https://www.csis.org/analysis/made-china-2025.

¹⁴⁰ Xu Wei, *China to Further Reform to Drive Innovation*, CHINA GOV'T WEBSITE (Aug. 30, 2017), http://english.www.gov.cn/premier/news/2017/08/30/content_281475826050062.htm. ¹⁴¹ *Vision and Actions on Jointly Building Belt and Road*, NAT'L DEV. & REFORM COMM'N, MINISTRY OF FOREIGN AFFS., & MINISTRY OF COM. OF CHINA (March 28, 2015), http://www.china.org.cn/china/Off the Wire/2015-03/28/content 35182638.htm.

¹⁴² Maria Adele Carrai et al., *The Belt and Road Initiative and Global Governance: By Way of Introduction*, in The Belt and Road Initiative and Global Governance 1 (Maria Adele

In fact it [AI] is part of the Belt and Road — with the potential for being a much cheaper, quicker and more potent way for China to build its influence. The flow of data could, ultimately, be a far more powerful political tool than the flow of cars and trains. If China's build-it-first AI strategy works, it could be disastrous for American interests abroad. 143

It is no surprise that intellectual property rights increasingly matter to the PRC,¹⁴⁴ especially in Artificial Intelligence. For over a decade, the PRC has filed more patents than the U.S., EU, Japan and South Korea combined.¹⁴⁵ China first led the ranking for both the source (filings by China) and the destination (filed in China) in 2012.¹⁴⁶ In 2021, the World Intellectual Property Organization reported that in, China maintains the "largest user position of international patent applications" in the Patent Cooperation Treaty system of the World Intellectual Property Organization.¹⁴⁷ As such it remains the country with the largest number of international patent applications.¹⁴⁸ China has continued to lead on regulating Artificial Intelligence.¹⁴⁹

But for all the guidelines, measures and laws, the PRC's record on prioritizing ethics is a little spotty. There are concerns about privacy and civil liberties, for the Chinese government has used AI for surveillance, censorship, and social control purposes in the past. China has long lagged behind when it comes to the implementation of human rights. ¹⁵⁰ A recent example occurred when the PRC was found to be using facial recognition software to monitor its Muslim minority, the Uighurs, integrating AI into the surveillance activities of its CCTV system. ¹⁵¹ In fact, Xinjiang has a major

CARRAI ET AL. EDS. 2020).

¹⁴³ Drexel & Kelly, *supra* note 86.

¹⁴⁴ James M. Cooper, *Games Without Frontiers: The Increasing Importance of Intellectual Property Rights for the People's Republic of China*, 22 WAKE FOREST J. BUS. & INTEL. PROP. L. 43, 50 (2021).

¹⁴⁵ Andreas Becker, *China Flexes its Patent Muscle*, DEUTSCHE WELLE (Mar. 7, 2018), https://www.dw.com/en/china-flexes-its-patent-muscle/a-42872310.

¹⁴⁶ WORLD INTELL. PROP. ORG., WORLD INTELLECTUAL PROPERTY INDICATORS 7 (2013), http://www.wipo.int/edocs/pubdocs/en/intproperty/941/wipo_pub_941_2013.pdf.

¹⁴⁷ Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645.

¹⁴⁸ Innovation Perseveres: International Patent Filings via WIPO Continued to Grow in 2020 Despite COVID-19 Pandemic, WORLD INTELL. PROP. ORG. (Mar. 2, 2021), https://www.wipo.int/pressroom/en/articles/2021/article 0002.html.

¹⁴⁹ Cassandre Coyer, *China's AI Regulation Proposal Could Reach Well Beyond Its Borders*, LAW.COM (Apr. 24, 2023), https://www.law.com/legaltechnews/2023/04/24/chinas-airegulation-proposal-could-reach-well-beyond-its-borders.

¹⁵⁰ The Chinese Communist Party's Human Rights Abuses in Xinjiang, U.S. DEPT. OF STATE, https://2017-2021.state.gov/ccpabuses.

¹⁵¹ Paul Mozur, One Month, 500,000 Face Scans: How China is Using A.I to Profile a Minority, N.Y. TIMES (Apr. 14, 2019), https://www.nytimes.com/2019/04/14/technology/

urban laboratory, the site of the large-scale oppression of the Uighur population. ¹⁵² It is no surprise that international condemnation resulted. ¹⁵³ This stain provides an opportunity for the U.S. to demonstrate its commitment to promoting ethics in Artificial Intelligence. It is just that the U.S. government's initiatives have emerged in dribs and drabs rather than the cohesive, large-scale projects as seen in the People's Republic of China.

IV. THE APPROACH OF THE UNITED STATES OF AMERICA

There are a number of statutes already in force in the U.S. that could be applied to Artificial Intelligence. These laws currently in force which impact AI and ML including the Fair Credit Reporting Act of 1970 (FCRA) and the Equal Credit Opportunity Act (ECOA) both of which deal with automated decision-making. ¹⁵⁴ For decades, financial services companies have been applying these laws to machine-based credit underwriting models.

The FCRA imposes regulations on consumer reporting agencies making decision on housing, employment, and credit.¹⁵⁵ The FCRA imposes obligations if a company buys scores that were developed by AI data and those scores are used to make decisions on employment or housing.¹⁵⁶ The FCRA imposes obligations on adverse action notice (reasons for denial, imposed requirements that information is maximally accurate).¹⁵⁷

The ECOA was enacted on October 28, 1974. The ECOA makes it "unlawful for any creditor to discriminate against any applicant, with respect to any aspect of a credit transaction...on the basis of race, color, religion, national origin, sex or marital status, or age (provided the applicant has the capacity to contract). Is In addition, no discrimination is permitted based on the applicant's use of a public assistance program to receive all or part of their income nor for the applicant's previous good-faith exercise of any right

china-surveillance-artificial-intelligence-racial-profiling.html.

¹⁵² Chris Buckley & Paul Mozur, *How China Uses High-Tech Surveillance to Subdue Minorities*, N.Y. TIMES (May 22, 2019), https://www.nytimes.com/2019/05/22/world/asia/china-surveillance-xinjiang.html.

¹⁵³ Zak Doffman, *China is Using Facial Recognition to Track Ethnic Minorities, Even In Beijing*, FORBES (May 3, 2019), https://www.forbes.com/sites/zakdoffman/2019/05/03/chinanew-data-breach-exposes-facial-recognition-and-ethnicity-tracking-in-beijing/#562364433 4a7.

¹⁵⁴ Fair Credit Reporting Act, 15 U.S.C. §§ 1681-1681x (1970); Equal Credit Opportunity Act, 15 U.S.C. §§ 1691-1691f (1974).

^{155 15} U.S.C. §§ 1681-1681x.

¹⁵⁶ Id. at § 1681g.

¹⁵⁷ Id. at § 1681m.

¹⁵⁸ Id. at § 1691f.

¹⁵⁹ Id. at § 1691f(a).

under the Consumer Credit Protection Act (CCPA). ¹⁶⁰ Any person who, in the ordinary course of business, regularly participates in a credit decision, including banks, retail outlets, bankcard companies, finance companies, and credit unions is protected by the Consumer Credit Protection Act. ¹⁶¹

The Act (Title VI of the Consumer Credit Protection Act) protects information collected by consumer reporting agencies such as credit bureaus, medical information companies and tenant screening services. Information in a consumer report cannot be provided to anyone who does not have a purpose specified in the Act. Companies that provide information to consumer reporting agencies also have specific legal obligations, including the duty to investigate disputed information. In addition, users of the information for credit, insurance, or employment purposes must notify the consumer when an adverse action is taken on the basis of such reports. The Fair and Accurate Credit Transactions Act added many provisions to this Act primarily relating to record accuracy and identity theft. The Dodd-Frank Act transferred to the Consumer Financial Protection Bureau most of the rulemaking responsibilities added to this Act by the Fair and Accurate Credit Transactions Act and the Credit CARD Act, but the Commission retains all its enforcement authority. 162

These laws revolve around explainability and risks. For example, with the Federal Trade Commission Act, AI is already under purview of the Federal Trade Commission (FTC). The FTC has put out guidance on how they might use the Act for regulating Artificial Intelligence. The FTC has a long history of dealing with the challenges that come with the use of data and algorithms in decision-making about customers as well as consumer surveillance. These laws protect generally against unfair deceptive practices. The FTC addresses the following questions: What is the injury to consumers? The sale or use of a racially discriminatory algorithm could be

¹⁶⁰ Id. at §§ 1601-1693r.

¹⁶¹ Id. at § 1691aI.

¹⁶² Fair Credit Reporting Act, FED. TRADE COMM'N (last visited Jan. 26, 2024), https://www.ftc.gov/legal-library/browse/statutes/fair-credit-reporting-act.

¹⁶³ Federal Trade Commission Act, 15 U.S.C. §§ 41-58 (1914) (amended 1938).

¹⁶⁴ Elisa Jillson, *Aiming for Truth, Fairness, and Equity in Your Company's Use of AI*, FTC BUS. BLOG (Apr. 19, 2021), https://www.ftc.gov/business-guidance/blog/2021/04/aiming-truth-fairness-equity-your-companys-use-ai.

¹⁶⁵ Andrew Smith, *Using Artificial Intelligence and Algorithms*, FTC Bus. Blog (Apr. 8, 2020), https://www.ftc.gov/business-guidance/blog/2020/04/using-artificial-intelligence-algorithms.

¹⁶⁶ See FTC Trade Regulation Rule on Commercial Surveillance, 87 Fed. Reg. 51273 (Aug. 22, 2022) (to be codified at 16 C.F.R. ch. 1).

an unfair practice. 167

Much of the advances in AI has come out of the U.S. over the last five decades, marking the U.S. as the long-time leader in this emerging technology.

Core to the mistaken belief that the United States holds a major edge in AI is the impression that we are living in an age of discovery, a time in which elite AI researchers are constantly breaking down old paradigms and finally cracking longstanding mysteries. This impression has been fed by a constant stream of breathless media reports announcing the latest feat performed by AI; diagnosing certain cancers better than doctor, beating human champions at the bluff-heavy game of Texas Hold'em, teaching itself how to master new skills with zero human interference. 168

It is no surprise then that the U.S. has the largest number of active patents, and the Trump administration created the American Artificial Intelligence Initiative to help continue its growth. 169

Much of U.S. legislation relates to the preservation and strengthening of the U.S. as a global leader in AI research and application. Guidelines for its ethical use, not so much. Concerning the former, the National AI Initiative was gradually established through executive orders signed by President Donald J. Trump and laws passed by Congress that were subsequently enacted. On February 11, 2019, Executive Order 13859 – Maintaining American Leadership in AI–was signed. The American AI Initiative was thus created by President Trump with Executive Order 13859, which identified five key areas of effort: (1) the increase in AI research investment, (2) the release of Federal AI computing and data resources, (3) the promulgation of AI technical standards, (4) the capacitation of AI workforce of the U.S., and (5) the engagement with international allies. 171

On August 9, 2019, the U.S. Department of Commerce's National Institute of Standards and Technology (NIST) published a plan to prioritize federal agency engagement in the development of AI standards. This was, in

¹⁶⁷ Lina Khan, Opinion, *We Must Regulate A.I. Here's How*, N.Y. TIMES (May 3, 2023), https://www.nytimes.com/2023/05/03/opinion/ai-lina-khan-ftc-technology.html.

¹⁶⁸ LEE, *supra* note 74, at 12.

¹⁶⁹ See generally Stanford Univ., Artificial Intelligence Index Report 2022, at 37 (2022).

¹⁷⁰ Exec. Order No. 13859, 84 Fed. Reg. 3967 (Feb. 11, 2019).

¹⁷¹ Id

¹⁷² NAT'L INST. OF STANDARDS & TECH., U.S. LEADERSHIP IN AI: A PLAN FOR FEDERAL ENGAGEMENT IN DEVELOPING TECHNICAL STANDARDS AND RELATED TOOLS (2019), https://www.nist.gov/system/files/documents/2019/08/10/ai_standards_fedengagement_plan_9aug2019.pdf; see also AI Standards: Federal Engagement, NAT'L INST. OF STANDARDS & TECH., https://www.nist.gov/artificial-intelligence/ai-standards (last updated Apr. 5, 2022).

essence, a plan to have a plan for AI guidelines. These initiatives were codified into law as part of the National AI Initiative Act of 2020. 173 On December 3, 2020, President Donald J. Trump signed Executive Order 13960 on Promoting the Use of Trustworthy AI in the Federal Government, 174 which recommends that the federal government undertake a number of things including: Increasing AI standards-related knowledge, strengthening leadership and coordination among agencies that develop or use AI, promoting focused research on the trustworthiness of AI systems, supporting and expanding public-private partnerships, and engaging with international parties. 175 The Executive Order recommends that the federal government "commit to deeper, consistent, long-term engagement in AI standards development activities" to accelerate the pace of reliable, robust, and trustworthy AI technology development in the United States. 176 The AI community has agreed that these issues must factor into AI standards. 177 But, many decisions still need to be made about whether enough scientific and technical basis exists to develop standards provisions. ¹⁷⁸ The AI must be trustworthy.

The growth of AI has led to many countries creating governance principles, but the U.S. has not taken a formal legislative approach.¹⁷⁹ There has been little thinking and enforcement of a national plan, with adequate funding. There has been no Moonshot Project for AI in the U.S., like in China with the latter's Made in China 2025. The AI space has been driven by technology and national defense industry private companies. Some it was outsourcing for the U.S. government. It mandated for all federal government agencies to file a plan. According to the Stanford University Human-Centered Artificial Intelligence, "88 percent of agencies that are likely

¹⁷³ AI in Government Act of 2020, Pub. L. 116–260, 134 Stat. 2286 (2021).

¹⁷⁴ Exec. Order No. 13960, 85 Fed. Reg. 78939 (Dec. 3, 2020).

¹⁷⁵ Id.

¹⁷⁶ Plan Outlines Priorities for Federal Agency Engagement in AI Standards Development, NAT'L INST. OF STANDARDS & TECH. (Aug. 12, 2019), https://www.nist.gov/news-events/news/2019/08/plan-outlines-priorities-federal-agency-engagement-ai-standards-development [hereinafter *Priorities for Federal Agency in AI Standards*].

¹⁷⁷ Rebecca Heilweil & Madison Alder, *The Government is Struggling to Track its AI. And That's a Problem*, FEDSCOOP (Aug. 3, 2023), https://fedscoop.com/the-government-is-struggling-to-track-its-ai-and-I-a-problem/.

¹⁷⁸ See Priorities for Federal Agency in AI Standards, supra note 176.

¹⁷⁹ Andrei Klubnikin, *How Biden's National AI Strategy Will Impact the Government, Businesses, and Society*, ITREX (June 22, 2021), https://itrexgroup.com/blog/bidens-national-ai-strategy-impact-on-government-business-society/#.

¹⁸⁰ OMB Releases Implementation Guidance Following President Biden's Executive Order on Artificial Intelligence, White House (Nov. 1, 2023)

https://www.whitehouse.gov/omb/briefing-room/2023/11/01/omb-releases-implementation-guidance-following-president-bidens-executive-order-on-artificial-intelligence/.

subject to the requirement to submit Agency AI Plans under the AI Leadership Order have failed to do so." ¹⁸¹

Until recently, some U.S. Presidents had put out their own set of principles for AI, but there has been no comprehensive legislation. Under President Barack Obama, there was the Fixing America's Surface Transportation Act of 2015. President Trump instigated funding for AI initiatives through the FAA Reauthorization Act of 2018. The National AI Initiative Act of 2020 provided for a coordinated program across the entire Federal government to accelerate AI research and application for the Nation's economic prosperity and national security. The National Security of the Nation's economic prosperity and national security.

More recent American plans have emphasized allowing entrepreneurs and creators to act independently in hopes to promote Artificial Intelligence. President Trump's provisions were incorporated into the American AI Initiative, which included: investing in AI research and development; unleashing AI resources; removing barriers to AI innovation; promoting an international environment supportive of American AI innovation. He American AI Initiative also embraced trustworthy AI for government services and missions, along with training an AI-ready workforce. Notwithstanding these efforts, U.S. lawmakers sent a letter to the National Science Foundation (NSF) and the Office of Science and Technology Policy, encouraging the expansion of efforts to use AI in a safe and ethical manner through a task force.

Trustworthy AI became a touchpoint with the leadership and the increasing use of AI in business, education, and the public sector. Indeed, there were some concerns coming from the government's main watchdog agency—the Government Accountability Office. In July 2021, the GAO released a report that found that the use of facial recognition technology may threaten federal

¹⁸¹ CHRISTIE LAWRENCE, ISAAC CUI & DANIEL E. HO, IMPLEMENTATION CHALLENGES TO THREE PILLARS OF AMERICA'S AI STRATEGY 4 (Stanford Univ. Hum.-Centered A.I. 2022).

¹⁸² Fixing America's Surface Transportation Act, Pub. L. No. 114-94, § 6004, 129 Stat. 1312, 1562 (2015).

¹⁸³ FAA Reauthorization Act of 2018, H.R. 302, 115th Cong. § 548 (2018).

¹⁸⁴ Public Sector Engagements, USPTO, https://www.uspto.gov/initiatives/artificial-intelligence/public-sector-engagements (last visited Oct. 28, 2023), citing National Artificial Intelligence Initiative Act, 15 U.S.C. § 9411 (2021).

¹⁸⁵ Lynne Parker, *The American AI Initiative: The U.S. Strategy for Leadership in Artificial Intelligence*, OECD.AI (June 11, 2020), https://oecd.ai/en/wonk/the-american-ai-initiative-the-u-s-strategy-for-leadership-in-rtificial-intelligence.

¹⁸⁶ *Id*.

¹⁸⁷ Id.

¹⁸⁸ Dave Nyczepir, *Lawmakers Want Task Force Designing National AI Resource Staffed with Experts*, FEDSCOOP (Jan. 27, 2022), https://fedscoop.com/lawmakers-want-ai-task-force-staffed/.

agencies and the public. 189

Upon entering office, President Joseph R. Biden faced concerns about the U.S.'s comparatively weak foundation for AI growth compared to China's AI prowess. ¹⁹⁰ In 2021, President Biden announced the creation of an AI task force to research tools for AI innovation and to foster economic prosperity. ¹⁹¹ The task force was to act like the committees from other countries and will work to improve access to resources, provide governance principles, and draft requirements for security, privacy, civil rights, and civil liberties. ¹⁹²

On March 20, 2021, a bill was introduced into the Senate requiring the Secretary of Commerce to establish the Federal Advisory Committee on the Development and Implementation of Artificial Intelligence.¹⁹³ This generated momentum towards creating a national strategy on AI or, at the very least, forming a committee to begin its articulation. While the U.S.'s elected officials were thinking about getting a committee together to create a national strategy (a plan to create a plan),¹⁹⁴ the PRC already began rolling out its own version and working to dominate this future industry.¹⁹⁵

Notably, in the last year of the Trump administration, following the recommendations provided to Secretary of Defense Mark Esper, a series of ethical principles concerning the use of Artificial Intelligence were adopted by the U.S Department of Defense. 196 Almost a year later, the U.S. military

¹⁸⁹ Heidi Johnson, US Government Watchdog Finds Federal Use of Artificial Intelligence Poses Threat to Federal Agencies and Public, Jurist (July 5, 2021), https://www.jurist.org/news/2021/07/us-government-watchdog-finds-federal-use-of-artificial-intelligence-poses-threat-to-federal-agencies-and-public/; see also U.S. Gov't Accountability Off., GAO-21-518, Facial Recognition Technology: Federal Law Enforcement Agencies Should Better Assess Privacy and Other Risks (2021), https://www.gao.gov/assets/gao-21-518.pdf.

¹⁹⁰ See generally Press Release, The Biden Administration Launches the National Artificial Intelligence Research Resource Task Force, White House (June 10, 2021), https://www.whitehouse.gov/ostp/news-updates/2021/06/10/the-biden-administration-launches-the-national-artificial-intelligence-research-resource-task-force/ [hereinafter White House NAIRR Task Force Launch]; see also Klubnikin, supra note 179.

¹⁹¹ White House NAIRR Task Force Launch, *supra* note 190; see also Klubnikin, *supra* note 179.

¹⁹² See White House NAIRR Task Force Launch, supra note 190.

¹⁹³ S. 3771, 116th Cong. §§ 1-3 (2020).

¹⁹⁴ See Brennan, supra note 28 ("[A]ccording to James Cooper, a California Western School of Law professor and director of its international legal studies program, that document is more of a plan to have a plan. With the AI landscape shifting rapidly, such efforts may not be meaningful, he said.").

¹⁹⁵ Matt Sheehan, *China's AI Regulations and How They Get Made* 3 (Carnegie Endowment for Int'l Peace, Working Paper, 2023), https://carnegieendowment.org/files/202307-Sheehan Chinese%20AI%20gov.pdf.

¹⁹⁶ Press Release, U.S. Dep't of Defense, DOD Adopts Ethical Principles for Artificial Intelligence (Feb. 24, 2020), https://www.defense.gov/News/Releases/Release/Article/

shifted the focus of the office within the Defense Department responsible for assisting military services and agencies in determining the best ways to incorporate the technologies into their systems. ¹⁹⁷ The White House proposal was believed to "limit the overreach of authorities." ¹⁹⁸ President Trump did try to get some traction within the federal government, proposing to increase funding for AI development through the NSF in his fiscal 2021 budget in February 2020. ¹⁹⁹

The U.S. government has provided some legislation dealing with Artificial Intelligence. This is evidenced by federal laws passed during the 115th Congressional session, which helped define the term "Artificial Intelligence." Section 238 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 directs the Department of Defense to undertake several activities regarding Artificial Intelligence. Subsection (f) instructs the Secretary of Defense to "delineate a definition of the term artificial intelligence" for use within the Department" no later than one year after the law's enactment. Subsection (g) provides the following definition of Artificial Intelligence: Use Market Subsection (g) provides the following definition of Artificial Intelligence:

- (g) ARTIFICIAL INTELLIGENCE DEFINED—In this section, the term "artificial intelligence" includes the following:
- (1) Any artificial system that performs tasks under varying and

2091996/dod-adopts-ethical-principles-for-artificial-intelligence/.

¹⁹⁷ Gopal Ratnam, *Pentagon Aims to Spread Artificial Intelligence Across Military Services*, ROLL CALL (Jan. 14, 2021), https://rollcall.com/2021/01/14/pentagon-aims-to-spread-artificial-intelligence-across-military-services/.

¹⁹⁸ David Shepardson, *White House Proposes Regulatory Principles to Govern AI Use*, REUTERS (Jan. 6, 2020), https://www.reuters.com/article/us-tech-ces-ai-white-house/white-house-*proposes-regulatory-principles-to-govern-ai-use-*idUSKBN1Z60GL.

¹⁹⁹ See Off. of Sci. & Tech. Pol'y, President Trump's FY 2021 Budget Commits to Double Investments in Key Industries of the Future, TRUMP WHITE HOUSE (Feb. 11, 2020), https://trumpwhitehouse.archives.gov/briefings-statements/president-trumps-fy-2021-

budget-commits-double-investments-key-industries-future/; Chris Mills Rodrigo, *Trump Budget Proposal Boosts Funding for Artificial Intelligence, Quantum Computing*, THE HILL (Feb. 10, 2020), https://thehill.com/policy/technology/482402-trump-budget-proposal-boosts-funding-for-artificial-intelligence-quantum/.

²⁰⁰ Artificial Intelligence Legislation Tracker, BRENNAN CTR. FOR JUST. (Aug. 7, 2023), https://www.brennancenter.org/our-work/research-reports/artificial-intelligence-legislation-tracker.

²⁰¹ S. Res. 2806, 115th Cong. (2018) (enacted).

²⁰² H.R. Res. 5515, 115th Cong. (2018) (enacted).

²⁰³ Civil Action for Deprivation of Rights, 42 U.S.C. § 1983 (1979). *Cf.* Matt O'Shaunessy, *One of the Biggest Problems in Regulating AI Is Agreeing on a Definition*, CARNEGIE ENDOWMENT FOR INT'L PEACE (Oct. 6, 2022), https://carnegieendowment.org/2022/10/06/one-of-biggest-problems-in-regulating-ai-is-agreeing-on-definition-pub-88100.

²⁰⁴ H.R. Res. 5515, 115th Cong. (2018) (enacted).

unpredictable circumstances without significant human oversight, or that can learn from experience and improve performance when exposed to data sets.

- (2) An artificial system developed in computer software, physical hardware, or other context that solves tasks requiring human-like perception, cognition, planning, learning, communication, or physical action.
- (3) An artificial system designed to think or act like a human, Including cognitive architectures and neural networks.
- (4) A set of techniques, including machine learning, that is designed to approximate a cognitive task.
- (5) An artificial system designed to act rationally, including an intelligent software agent or embodied robot that achieves goals using perception, planning, reasoning, learning, communicating, decision making, and acting.

With that definition in mind, in June 2020, the 116th Congressional session passed the National AI Research Resource Task Force Act. ²⁰⁵ Under the Act, lawmakers created a task force to achieve the bill's goal of making AI more accessible to the general public for research purposes. ²⁰⁶ The Act called for the White House Office of Science and Technology Policy (OSTP) and the NSF to create a National AI Research Resource (NAIRR) Task Force to explore the feasibility of creating a resource for AI research. ²⁰⁷ Moreover, "[i]n the 117th Congress, at least seventy-five bills were introduced that either focused on AI and ML or had AI/ML-focused provisions. Six of those were enacted." These laws were generally directed at specific agencies to create programs or for the federal government to create plans for AI development.

The NAIRR Task Force officially started in June 2021 and included government, academia, and private sector professionals.²⁰⁹ Its plan was to develop a report to assist in the eventual a National AI Research Resource. The overarching goal was to create a mechanism giving students and researchers access to AI-backed research which would then expand resources, data, and educational tools.²¹⁰ Previously, the quickly growing field of AI-backed research was a tool only accessible to well-resourced

²⁰⁵ S. Res. 3890, 116th Cong. (2020) (enacted).

²⁰⁶ Id.

²⁰⁷ I.A

²⁰⁸ Considerations for the 118th Congress, *supra* note 69, at 1.

²⁰⁹ National AI Initiative, NAT'L SCI. FOUND., https://www.nsf.gov/cise/national-ai.jsp, (last visited Oct. 28, 2023).

²¹⁰ Nyczepir, *supra* note 188.

companies and institutions.²¹¹

The Task Force examined: (1) governance models; (2) the resource's required capabilities; (3) different security requirements; (4) privacy of requirements of different rights including privacy, civil rights assessments; (5) assessment, and civil liberties; (6) appropriate NAIRR ownership; (7) how to properly disseminate governmental datasets; and (8) a plan for sustaining the resource, through public-private partnerships.²¹² Originally due by November 2022, the Task Force released its official final report on January 24, 2023.²¹³ In the report, the Task Force released a plan to construct a NAIRR, costing a total of \$2.6 billion over a six-year time period.²¹⁴

The report's initial letter first details AI's importance as a problem-solving mechanism, then highlights accessibility issues emerging from AI research that requires large data volumes and advanced computing. The report then detailed a plan to: (1) spur innovation; (2) increase talent diversity; (3) improve capacity; and (4) advance trustworthy Artificial Intelligence. To achieve the goals, the NAIRR supports a diverse class featuring researchers, educators integrating AI with learning, and students. Class members represent: academia, civilian agencies, federal and federally funded agencies; and others. ²¹⁷

Success depends on the leadership and participation of many government, academic, industry, and civil society groups. ²¹⁸ Federal agencies and offices already provide substantial funding to support AI research and design as a way to facilitate federal principal sponsorship. ²¹⁹ They could work more efficiently from implementing a national resource and could also contribute large datasets, computing resources, software tools, and testbeds. ²²⁰

²¹¹ Press Release, Off. of Sci. & Tech. Pol'y, National Artificial Intelligence Research Resource Task Force Releases Final Report (Jan. 24, 2023), https://www.whitehouse.gov/ostp/news-updates/2023/01/24/national-artificial-intelligence-research-resource-task-force-releases-final-report/.

²¹² National AI Initiative: About the Task Force, NAT'L SCI. FOUND., https://www.nsf.gov/cise/national-ai.jsp (last visited Nov. 11, 2023).

²¹³ NAT'L ARTIFICIAL INTEL. RSCH. RES. TASK FORCE, STRENGTHENING AND DEMOCRATIZING THE U.S. ARTIFICIAL INTELLIGENCE INNOVATION ECOSYSTEM app. at J-2 (2023), https://www.ai.gov/wp-content/uploads/2023/01/NAIRR-TF-Final-Report-2023.pdf [hereinafter NAIRR TASK FORCE REPORT].

²¹⁴ Kurt Mackie, *Report Outlines Creation of a \$2.6B U.S. National AI Research Capability*, REDMOND MAG. (Jan. 25, 2023), https://redmondmag.com/articles/2023/01/25/creation-of-national-ai-research-capability.aspx.

²¹⁵ See NAIRR TASK FORCE REPORT, supra note 213, at ii.

²¹⁶ Id. at v.

²¹⁷ *Id* at 8-9.

²¹⁸ Id at 10.

²¹⁹ Id.

²²⁰ Id. at 10.

The next integral group is academia. The NAIRR offers unique value to institutions lacking federal AI research funding.²²¹ Therefore, new opportunities exist for those institutions to broaden research participation and strengthen research capacity. Academia's role in implementation is vital to the NAIRR's growth. Diverse AI workforce expansion is to begin at an institutional level.²²²

Industry and civil society are also important to implementation. Both forprofit and non-profit industries can provide funding and growth, leading to experts serving as technical advisers.²²³ The NAIRR can also showcase AI's societal benefits. Groups interested in the implications of AI can utilize the resource.²²⁴

Following the NAIRR, a lot of expectations came out of the White House. There was an attempt to address and eliminate inequity and unfairness in decision-making processes while advancing civil rights, equal opportunity, and racial justice. In healthcare, credit evaluation, and social media sectors, technology, data, and automated systems can function as: (1) threats to individual rights; (2) opportunity limiters; and (3) obstacles to resources and services.

In October 2022, a Blueprint for an AI Bill of Rights ("the Blueprint") was released by the White House Office of Science and Technology.²²⁸ To eliminate such disparity-causing functionalities ("functionalities"), the Blueprint enumerates five principles ("principles") guiding AI design, use, and deployment. These principles are meant to protect the public from falling victim to the functionalities. The Blueprint also provides guidance to those implementing such technology so that the resulting implementations both incorporate the principles and avoid such functionality instantiation.²²⁹ The principles are entitled: (1) safe and effective systems; (2) algorithmic discrimination protections; (3) data privacy; (4) notice and explanation; and

²²¹ Id

²²² See id. at 10-11.

²²³ Id.

²²⁴ Id at 11

²²⁵ See Makenzie Holland, Biden's Top Science Advisor Working on AI Bill of Rights: A National AI Bill of Rights Could Include the Rights to Transparency and Data Governance, According to Biden's Top Science Advisor, TECHTARGET (Nov. 9, 2021), https://www.techtarget.com/searchenterpriseai/news/252509301/Bidens-top-science-advisorworking-on-AI-bill-of-rights.

²²⁶ Request for Information (RFI) on an Implementation Plan for a National Artificial Intelligence Research Resource, 86 Fed. Reg. 46278 (Aug. 18, 2021).

²²⁷ See Off. of Sci. & Tech. Pol'y, Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People, White House (Oct. 4, 2022), https://www.whitehouse.gov/ostp/ai-bill-of-rights/.

²²⁸ Id.

²²⁹ Id.

(5) human alternatives, consideration, and fallback.²³⁰

Systems such as an AI platform must adhere to certain standards to be safe and effective in the manner the Blueprint intends. The standards include: (1) experts identifying potential risks; (2) pre-deployment testing; (3) ongoing monitoring; (4) the decision not to deploy if endangering the community or user safety is reasonably foreseeable. Furthermore, a safe and effective system should exclude inappropriate or irrelevant data use, while including independent evaluation and reporting to confirm safety and effectiveness. Finally, such reporting should be made public.²³¹

Designers should construct algorithms equitably, without discrimination based on race, color, ethnicity, sex, religion, age, national origin, disability, or any other legally protected classification. Such construction requires designers' proactive and continuous efforts. For example, designers can: (1) use representative data and protect against proxies for demographic features; (2) ensure design and development accessibility for people with disabilities; (3) test for and mitigate disparity in pre-deployment and during use; and (4) implement clear organizational oversight. In addition, designers should regularly perform algorithmic disparity impact assessments and publicize the results. ²³²

Default AI design choices should ensure that the systems protect citizens from privacy violations. Design choices should also "ensur[e] that data collection conforms to reasonable expectations" of privacy and that systems only collect data necessary for the specific context.²³³ Systems should seek citizens' meaningful, plain-language consent for data collection, use, access, transfer, and deletion, to the greatest extent possible. Areas that require attention include health, work, education, criminal justice, and juvenile areas and should feature enhanced protections and be restricted to essential uses. Surveillance technologies should include heightened oversight, and should not function continuously in education, work, housing, or other contexts where use can limit rights or opportunities. ²³⁴

Any AI system should put users on notice of its use. Notice should include a plain-language explanation of how and why the system impacts the user. Explanations should also include: (1) system function descriptions and roles; (2) the entity responsible for the system; and (3) clear explanations of outcomes.²³⁵ Furthermore, an explanation should be technically valid, meaningful, useful, and calibrated to the risk level of any user. Finally, designers should publicly report periodic assessments of the clarity and

²³⁰ Id.

²³¹ *Id*.

²³² *Id*.

²³³ Id.

²³⁴ Id.

²³⁵ Id.

quality of the notice and explanations. ²³⁶

Users should be able to opt out of automated systems where a human alternative may be appropriate. Appropriateness is to be determined by reasonable expectations in the same or similar circumstances, with a focus on preventing impact harmful to the public. If a system fails, users should have access to a human with an equitable, accessible, and effective remedy. Systems within sensitive domains should serve their specific purpose, with meaningful oversight access and human control over high-risk decisions. Periodic human governance process assessments should be made public whenever possible. 237

The fast pace of AI usage since November 2022 (the date when ChatGPT was released) has only grown exponentially, as governments try to catch up. 238 Clearly, there is pressure on the U.S. government to act in a comprehensive way. Senate Majority Leader Chuck Schumer made some attempts in April 2023. 239 By May 2023, legislators in Washington D.C. got engaged, albeit a little late. 240 The White House, too, increased its attention with new actions to protect Americans' rights and safety in the face of advancing AI development. 241 Some analysts called for a "Manhattan Project" for AI safety. With the high-profile Congressional testimony of New York University Professor Emeritus Gary Marcus and Sam Altman, CEO of OpenAI, there is much expectation for regulation yet again. 243 Only

²³⁶ *Id*.

²³⁷ Id.

²³⁸ Mark Scott, *AI's Pandemonium Leaves Global Leaders Scrambling*, Politico (Apr. 20, 2023), https://www.politico.com/news/2023/04/20/global-confusion-new-ai-rules-00093074. ²³⁹ *Schumer Launches Major Effort to Get Ahead of Artificial Intelligence*, S. DEMOCRATS (Apr. 13, 2023), https://www.democrats.senate.gov/newsroom/press-releases/schumer-launches-major-effort-to-get-ahead-of-artificial-intelligence.

²⁴⁰ Brendan Bordelon & Mohar Chatterjee, 'It's Got Everyone's Attention': Inside Congress's Struggle to Rein in AI, POLITICO (May 4, 2023), https://www.politico.com/news/2023/05/04/congresss-scramble-build-ai-agenda-00095135.

²⁴¹ Press Release, Fact Sheet: Biden-Harris Administration Announces New Actions to Promote Responsible AI Innovation that Protects Americans' Rights and Safety, White House (May 4, 2023), https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/04/fact-sheet-biden-harris-administration-announces-new-actions-to-promote-responsible-ai-innovation-that-protects-americans-rights-and-safety/ [hereinafter White House Fact Sheet]. ²⁴² Samuel Hammond, *We Need a Manhattan Project for AI Safety*, POLITICO (May 8, 2023), https://www.politico.com/news/magazine/2023/05/08/manhattan-project-for-ai-safety-00095779.

²⁴³ See Oversight of A.I.: Rules for Artificial Intelligence: Hearing Before the Subcomm. on Priv., Tech., and the L., 117th Cong. (2023) (written testimony of Samuel Altman, CEO, OpenAI); Oversight of A.I.: Rules for Artificial Intelligence: Hearing Before the Subcomm. on Priv., Tech., and the L., 117th Cong. (2023) (senate testimony of Gary Marcus, Professor Emeritus, N.Y.U.).

a week after their appearance before the U.S. Senate Judiciary Subcommittee, the Biden-Harris administration announced even newer efforts "to advance the research, development, and deployment of responsible Artificial Intelligence (AI) that protects individuals' rights and safety and delivers results for the American people."²⁴⁴ The White House's OSTP issued a request for information about specific measures to ensure AI is both safely developed and deployed. Such a call for public comment was in response to the rapid adoption and implementation of AI technology and growing concerns over misinformation. ²⁴⁵

On October 30, 2023, the White House released a governance framework designed to mitigate bias, ensure privacy, and promote transparency around Artificial Intelligence.²⁴⁶ The executive order is a whole of government approach mandating that federal agencies undergo in-depth assessments of advanced AI tools prior to their deployment. It was anchored by the Defense Production Act of 1950,²⁴⁷ a law giving the President authority "to shape national defense preparedness programs and to take appropriate steps to maintain and enhance the domestic industrial base."²⁴⁸ The executive order streamlined high-skilled immigration to further the burgeoning industry and keep a steady supply of global talent to power U.S. efforts in the space. It also created several new government offices and task forces to increase use of AI in nearly every facet of federal government work such as health care, education, housing, and trade.

And while it was a long time in coming, the enforcement provisions of the executive order were tied to futuristic computational capacities that could diminish the regulatory sanctions. Some pundits questioned the genuineness effectiveness of the Executive Order.²⁴⁹ A day after the new executive order was signed, the Office of Management and Budget released draft guidelines to assist implement its two main thrusts:²⁵⁰ increasing AI talent in the U.S. government and increasing the transparency of the federal government's use

²⁴⁴ White House Fact Sheet, *supra* note 241.

²⁴⁵ Brian Fung, *Biden Administration Unveils an AI Plan Ahead of Meeting With Tech CEOs*, CNN (May 5, 2023), https://www.cnn.com/2023/05/04/tech/white-house-ai-plan/index.html.

²⁴⁶ Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, White House (Oct. 30, 2023), https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/.

²⁴⁷ Defense Production Act of 1950, 50 U.S.C. §§ 4501-4568 (1950).

²⁴⁹ Cat Casey, Expert Opinion, *Is the White House's AI Executive Order a FLOP?*, LAW.COM (Nov. 3, 2023), https://www.law.com/legaltechnews/2023/11/03/is-the-white-houses-ai-executive-order-a-flop/

²⁵⁰ Mohar Chatterjee, *OMB Tell Agencies to Focus on AI Talent and Transparency in New Guidelines*, Politico (Nov. 1, 2023), https://www.politico.com/news/2023/11/01/omb-ai-talent-transparency-guidelines-00124740.

of Artificial Intelligence.²⁵¹ Three days later after the newest Executive Order, Senate Intelligence Chair Mark Warner (D-Virginia) and Senator Jerry Moran (R-Kansas) introduced a bill to give the President Biden's Executive Order some teeth.²⁵² At this writing, there has been no movement on that Senate bill and no comprehensive legislation concerning AI has been introduced.

While the federal government gets its act together putting whole of government action into play, there is a paucity of regulation that applies across the country. Instead, the states are stepping in to fill the vacuum. California is set to regulate the use of AI in business. Introduced in 2018, SB 1001²⁵⁴ prohibits using bots to "communicate or interact online with a person in California in order to incentivize a sale or transaction of goods or services or to influence a vote in an election without disclosing that the communication is via a bot." A bot is defined as "an automated online account where all or substantially all of the actions or posts of that account are not the result of a person."

The California Consumer Privacy Act mandates that, in March 2023, consumers²⁵⁷ may opt out of AI algorithms that make legally binding decisions during profiling.²⁵⁸ Specifically, the Act governs such use in decisions related to "performance at work, economic situation, health, personal preferences, interests, reliability, behavior, location or movements."²⁵⁹ Thus, consumers have more control over the personal information that businesses collect about them.

In 2021, Colorado enacted SB 21-169. The law protects consumers from unfair insurance practice discrimination that could arise from algorithms

²⁵¹ Proposed Memorandum from Shalanda D. Young, Director, Off. of Mgmt. & Budget, to the Heads of Exec. Dep'ts & Agencies (Nov. 1, 2023) (on file with author).

²⁵² Rebecca Kern & Brendan Bordelon, *Senators Push to Give Biden's AI Order More Teeth*, POLITICO (Nov. 2, 2023) https://www.politico.com/news/2023/11/02/senate-ai-bill-biden-executive-order-00124893.

²⁵³ Titus Wu, *California Seeks to Be First to Regulate Business Use of AI*, Bloomberg Law (Apr. 19, 2023), https://news.bloomberglaw.com/tech-and-telecom-law/california-seeks-to-be-first-to-regulate-business-use-of-ai.

²⁵⁴ S.B. 1001, 2018 Reg. Sess. (Cal. 2018).

²⁵⁵ Id.

²⁵⁶ Id.

²⁵⁷ CAL. CIV. CODE § 1798.100 (West 2018). See also California Consumer Privacy Act (CCPA), STATE OF CAL. DEP'T OF JUST. OFF. OF THE ATT'Y GEN. (May 10, 2023), https://oag.ca.gov/privacy/ccpa#:~:text=The%20California%20Consumer%20Privacy%20A ct,how%20to%20implement%20the%20law.

²⁵⁸ *Id*.

²⁵⁹ Id.

²⁶⁰ S.B. 21-169, 73d Gen. Assemb., Reg. Sess. (Colo. 2021).

using external consumer data to discriminate against protected classes.²⁶¹ The Colorado Privacy Act,²⁶² in effect in July 2023, provides consumers the right to opt out of personal data processing leading to decision-making.²⁶³ In addition, "[t]he law defines those decisions as 'a decision that results in the provision or denial of financial and lending services, housing, insurance, education enrollment or opportunity, criminal justice, employment opportunities, health care services, or access to essential goods or services."²⁶⁴

The Connecticut Privacy Act,²⁶⁵ effective July 2023, provides consumers the right to opt out of profiling, if such profiling is used to make legally binding decisions.²⁶⁶ Implementers must also perform a risk analysis if they use AI algorithms in:

[C]ertain profiling activities that present a reasonably foreseeable risk of unfair or deceptive treatment of or unlawful disparate impact on consumers, financial, physical or reputational injury to consumers, physical or other intrusion into the solitude, seclusion or private affairs or concerns of consumers that would be offensive to a reasonable person, or other substantial injury to consumers.²⁶⁷

Enacted in 2019, the Illinois AI Video Interview Act²⁶⁸ requires employers to: (1) notify applicants of AI use; (2) explain to employees how the AI works; (3) obtain consent; (4) only share videos of applicants with those evaluating the applicants; (5) destroy the videos upon the applicant's request; and (6) report demographic data of those applicants interviewed, hired, and interviewed but not hired.²⁶⁹ Effective October 2020, Maryland law HB 1202,²⁷⁰ prohibits employers from using facial recognition during preemployment interviews, unless the applicant signs a consent waiver.²⁷¹ Introduced in Montana's Legislature in February 2023, SB 384²⁷² regulates personal information collection and processing, profiling, and automated decision-making.²⁷³ It also enables individuals to opt out of profiling if AI

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<sup>261</sup> Id.
<sup>262</sup> Id.
<sup>263</sup> COLO. REV. STAT. § 6-1-1301 (2021).
<sup>264</sup> Id.
<sup>265</sup> 2022 Conn. Legis. Serv. 22-15 (West).
<sup>266</sup> Id.
<sup>267</sup> Id.
<sup>268</sup> 820 ILL. COMP. STAT. 42 (2019).
<sup>269</sup> Id. at §§ 5, 10, 15.
<sup>270</sup> MD. CODE ANN. LAB. & EMPL. § 3-717 (LexisNexis 2023).
<sup>271</sup> Id.
<sup>272</sup> S.B. 384, 68th Leg. (Mont. 2023).
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uses the profiling in legally binding decisions.²⁷⁴

In effect since January 2023, the Virginia Consumer Data Protection Act governs profiling and automated decision-making.²⁷⁵ It enables individuals to opt out of AI algorithms that use such actions to produce legally binding effects.²⁷⁶ Virginia has also legislated against the use of facial recognition.²⁷⁷ And more than states, cities have legislated on the use of AI in their jurisdiction.

Enacted December 2021, New York City Local Law 144²⁷⁸ requires employers to conduct regular audits to ensure that automated employment decision tools are not biased.²⁷⁹ Introduced in January 2023, SB 365²⁸⁰ requires companies to "disclose their use of automated decision-making that could have a 'materially detrimental effect' on consumers, such as a denial of financial services, housing, public accommodation, health care services, insurance, or access to basic necessities; or could produce legal or similarly significant effects."²⁸¹ In addition, companies must provide consumers with a way to contest negative decisions.²⁸² The contesting procedure must include human review of the decision.²⁸³ The law also mandates that consumers may opt out of AI algorithms that use profiling to make legally binding decisions.²⁸⁴

The robust nature of policy work being done at the local level in the U.S. is also important to note. ²⁸⁵ Some of the best AI regulation is emerging from U.S. cities. ²⁸⁶ San Francisco banned its law enforcement officials from using

²⁷⁴ Id.

²⁷⁵ VA. CODE ANN. §§ 59.1-571-581 (2023).

²⁷⁶ Id.

²⁷⁷ See Va. Code Ann. § 15.2-1723.2 (2021).

²⁷⁸ N.Y.C. INT. 1894-2020, Local Law 144 (enacted December 11, 2021), https://legistar.council.nyc.gov/LegislationDetail.aspx?ID=4344524&GUID=B051915D-A9AC-451E-81F8-6596032FA3F9.

²⁷⁹ James Cooper & Kashyap Kompella, *Artificial Intelligence Can Make Hiring More Inclusive, but Regulation is Necessary*, SAN DIEGO UNION-TRIB. (Apr. 26, 2023), https://www.sandiegouniontribune.com/opinion/commentary/story/2023-04-26/opinion-artificial-intelligence-hiring-job-applications-chatgpt-regulation-san-diego.

²⁸⁰ S.B. 365, 2023 Reg. Sess. (N.Y. 2023).

²⁸¹ Id

²⁸² Id

²⁸³ Id

²⁸⁴ Id.

²⁸⁵ See Nick Niedzwiadek & Olivia Olander, AI's Footprint in the Workplace Spreads as D.C. Stalls on Guardrails, POLITICO (May 6, 2023), https://www.politico.com/news/2023/05/06/ais-footprint-in-the-workplace-spreads-as-d-c-stalls-on-guardrails-00095418.

²⁸⁶ Nikki Davidson, *Map: How Are State and Local Governments Navigating AI Regulation?*, Gov't Tech. (Oct. 30, 2023), https://www.govtech.com/biz/data/how-are-state-and-local-governments-navigating-ai-regulation; NAT'L CONF. OF STATE LEGISLATURE, APPROACHES TO

facial recognition software in its operations. ²⁸⁷ So has Oakland. ²⁸⁸ Boston has taken a different approach, encouraging its municipal employees to use ChatGPT and other generative Artificial Intelligence. ²⁸⁹ What is glaring, however, is the slow work of regulation coming from the U.S. government itself. ²⁹⁰ To date, we have a blueprint, and a framework–basically, just some general guidelines.

V. CONCLUSION

There is a fundamental problem with the guidelines from China and those from the U.S.: they are not law. Guidelines may serve as a convenient reference tool for governments looking to adopt AI technology and make some media headlines. They can help provide minimum standards for effective, responsible public procurement and use of AI—standards that can eventually be adopted by industry and, more importantly, be enshrined into law. Mark Chinen has written:

There are good reasons why we would like to steer the development of AI applications, but it has been difficult to govern technology, particularly through harder forms of governance such as laws and regulations, even on the domestic level, let alone on the international plane.²⁹¹

The U.S. and China are not the only two countries working on AI itself while also working on the regulation of Artificial Intelligence. There has been some highly successful collaboration on regulation coming out of the EU, which first commissioned a High-Level Expert Group on AI which released Guidelines for Trustworthy Artificial Intelligence in April 2019.²⁹² The

 $Regulating A.I.: A Primer (2023), \ https://www.ncsl.org/technology-and-communication/approaches-to-regulating-artificial-intelligence-a-primer.$

²⁸⁷ See Niraj Chokshi, Facial Recognition's Many Controversies, From Stadium Surveillance to Racist Software, N.Y. TIMES (May 15, 2019), https://www.nytimes.com/2019/05/15/business/facial-recognition-software-controversy.html.

²⁸⁸ See Nathan Sheard, Oakland's Progressive Fight to Protect Residents from Government Surveillance, ELEC. FRONTIER FOUND. (Jan. 20, 2021), https://www.eff.org/deeplinks/2021/01/oaklands-progressive-fight-protect-residents-government-surveillance.

²⁸⁹ See Beth Simone Novek, Boston Isn't Afraid of Generative AI, WIRED (May 19, 2023), https://www.wired.com/story/boston-generative-ai-policy/.

²⁹⁰ Robert Seamans, *AI Regulation Is Coming to the U.S., Albeit Slowly*, FORBES (June 27, 2023), https://www.forbes.com/sites/washingtonbytes/2023/06/27/ai-regulation-is-coming-to-the-us-albeit-slowly/.

²⁹¹ MARK CHINEN, THE INTERNATIONAL GOVERNANCE OF ARTIFICIAL INTELLIGENCE 33 (2023).
²⁹² See Ethics Guidelines for Trustworthy AI, Eur. Comm'n (Apr. 8, 2019), https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai; Press Release, European Parliament, AI Act: A Step Closer to the First Rules on Artificial Intelligence (May 11, 2023), https://www.europarl.europa.eu/news/en/press-room/

European Parliament completed the first comprehensive legislation²⁹³ in the world concerning the development and use of AI, reaching a deal after three days of negotiations in Brussels on December 8, 2023.²⁹⁴ The legislation must still be voted upon by the European Parliament and the European Council, comprising representatives from the EU's twenty-seven Member States. ²⁹⁵ It is drafted in the context of other digital policy priorities like cybersecurity, data privacy (the GDPR), and intellectual property protection, all which predate the EU's AI legislative project.

Four years prior, the Organization for Economic Cooperation and Development (OECD) announced its own set of five AI principles, ²⁹⁶ utilizing a risk-based approach that could become a global benchmark. In 2020 the OECD's Global Partnership on AI and its AI Policy Observatory and Network of Experts on AI supported work among governments to support the development of AI for everyone. ²⁹⁷ There is no shortage of examples of best practices among the developed, northern industrialized countries and some developing countries too. For example, Ireland has developed its own national strategy. ²⁹⁸ Brazil's Congress has successfully passed a bill that creates a legal framework for AI use. ²⁹⁹ So have the Kingdom of Saudi Arabia ³⁰⁰ and Germany. ³⁰¹ Israel has also published a set

²⁰²³⁰⁵⁰⁵IPR84904/ai-act-a-step-closer-to-the-first-rules-on-artificial-intelligence.

²⁹³ See Commission Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM (2021) 206 final (Apr. 4, 2021); Spencer Feingold, The European Union's Artificial Intelligence Act, Explained, WORLD ECON. F. (June 30. 2023), https://www.weforum.org/agenda/2023/06/european-union-ai-act-explained/.

²⁹⁴ Kelvin Chan, Europe's World-Leading Artificial Intelligence Rules are Facing a Do-or-Die Moment, SEATTLE TIMES (Dec. 3, 2023), https://www.seattletimes.com/business/europesworld-leading-artificial-intelligence-rules-are-facing-a-do-or-die-moment/.

²⁹⁵ Adam Satariano, *E.U. Agrees on Landmark Artificial Intelligence Rules*, N.Y. TIMES (Dec. 8, 2023), https://www.nytimes.com/2023/12/08/technology/eu-ai-act-regulation.html.

²⁹⁶ See Will Knight, America and its Economic Allies Have Announced Five "Democratic" Principles for AI., MIT TECH. REV. (May 22, 2019), https://www.technologyreview.com/f/613573/america-and-its-economic-allies-announce-a-democratic-vision-for-ai/.

²⁹⁷ See About GPAI: Our Mission, GLOB. P'SHIP ON A.I., https://gpai.ai/about/# (last visited Oct. 9, 2023).

²⁹⁸ GOV'T OF IRELAND, AI EXEC. SUMMARY, *supra* note 72.

²⁹⁹ Câmara Aprova Projeto que Regulamenta Uso da Inteligência Artificial Fonte: Agência Câmara de Notícias, Câmara Dos Deputados (Sept. 29, 2021), https://www.camara.leg.br/noticias/811702-camara-aprova-projeto-que-regulamenta-uso-da-inteligencia-artificial.

³⁰⁰ SAUDI DATA & AI AUTH., REALIZING OUR BEST TOMORROW: STRATEGY NARRATIVE (2020), https://www.carringtonmalin.com/wp-content/uploads/2020/08/NDAIS-Strategy-Narrative-V2-19Oct20.pdf.

³⁰¹ *Ki-Monitoring: Standortbeschreibung Für Deutschland*, DIE BUNDESREGIERUNG, https://www.ki-strategie-deutschland.de/home.html (last visited Oct. 25, 2023).

of ethical guidelines on Artificial Intelligence. 302

There have been calls to incorporate the various principles and guidelines around the world into a comprehensive framework, understanding how to best integrate them.³⁰³ There is a practical reason for this: We operate in a global economy, and many AI projects have co-authors from the U.S. and China. There are Chinese data scientists working at U.S. academic institutions and corporate research laboratories.³⁰⁴ There may indeed be areas for common action from both the U.S. and China as:

[I]nternational cooperation will increasingly take the form of issue-specific coalitions instead of truly international (or even regional) institutions. At times, Beijing and Washington might belong to some of the same clubs: for example, when it comes to nonproliferation of cyberweapons and certain kinds of artificial intelligence tools. In the long run, the digital superpowers could even have a shared interest in introducing and enforcing some international regulations to protect their own companies from being overtaxed by other countries.³⁰⁵

Collaboration among policymakers regarding AI regulation is also crucial. 306 An index or framework could be developed to adequately translate the various competing guidelines. The Public Voice's Universal Guidelines for Artificial Intelligence is one such effort. 307 So is the International Research Center for AI Ethics and Governance. 308 The international community must determine how ethics guidelines can be interoperable. Lax AI—or a paucity of AI—standards should not be a competitive advantage for

³⁰² Amir Cahane, *Israeli AI Regulation and Policy White Paper: A First Glance*, ROBOTICS & A.I. L. Soc. (Nov. 13, 2022), https://blog.ai-laws.org/israeli-ai-regulation-and-policy-white-paper-a-first-glance/?cn-reloaded=1 (Israel's "Principles of Policy, Regulation and Ethics in AI" available in Hebrew at cited blogpost).

³⁰³ See Yi Zeng, Enmeng Lu & Cunqing Huangfu, Linking Artificial Intelligence Principles, CORNELL UNIV. (Dec. 12, 2018), https://arxiv.org/abs/1812.04814.

³⁰⁴ See Edmund L. Andrews, China and the United States: Unlikely Partners in AI, STANFORD HAI (Mar. 16, 2022), https://hai.stanford.edu/news/china-and-united-states-unlikely-partners-ai#:~:text=The%20newly%20released%20AI%20Index,between%20any%20other%20two%20nations.

³⁰⁵ Yan Xuetong, *Becoming Strong; The New Chinese Foreign Policy*, 100 FOREIGN AFFS. 40, 46 (2021).

³⁰⁶ Joshua P. Meltzer & Cameron F. Kerry, *Strengthening International Cooperation on Artificial Intelligence*, BROOKINGS (Feb. 17, 2021), https://www.brookings.edu/articles/strengthening-international-cooperation-on-artificial-intelligence/.

³⁰⁷ See Universal Guidelines for Artificial Intelligence, Pub. Voice (Oct. 23, 2018), https://thepublicvoice.org/ai-universal-guidelines/.

³⁰⁸ See Yi Zeng et al., *Projects: Linking AI Principles*, INT'L RSCH. CTR. FOR A.I. ETHICS & GOVERNANCE, https://ai-ethics-and-governance.institute/projects/ (last visited Oct. 9, 2023). See Yi Zeng et al., *Weaving a Global Network of AI Governance*, INT'L RSCH. CTR. FOR A.I. ETHICS & GOVERNANCE, https://ai-ethics-and-governance.institute (last visited Feb. 5, 2024).

countries seeking to attract the best talent. This should not be a race to the bottom. ³⁰⁹

AI requires updates to our regulatory approach and upgrades to our risk architectures. It may be that the world requires an international agency to regulate AI development and deployment across boundaries. Gary Marcus at a TED conference in Vancouver, Canada, "called for the establishment that there be an international institution to help govern A.I.'s development and use." Soon thereafter, in mid-May 2023, the Group of Seven (G7) economic group leaders agreed upon a "Hiroshima AI Process" for the rest of the year to determine a mechanism by which AI is to be regulated. 311

It was no surprise that in the summer of 2023, António Guterres, the Secretary General of the United Nations (UN), offered to the international community a new UN agency dedicated to Artificial Intelligence. After all, "[t]he United Nations views itself as playing an important role in the development and spread of emerging technologies." In November 2023, UK Prime Minister Rishi Sunak brought together political leaders from 28 countries, under the sponsorship of the UN, for an AI Safety Summit. The summit, which featured a speech by U.S. Vice-President Kamala Harris, was intended to develop understanding about shared risks and opportunities of

³⁰⁹ See Ryan Heath, China Races Ahead of U.S. on AI Regulation, AXIOS (May 8, 2023), https://www.axios.com/2023/05/08/china-ai-regulation-race.

³¹⁰ Gary Marcus, *The Urgent Risks of Runaway AI – and What to do About Them,* TED (Apr. 2023), https://www.ted.com/talks/gary_marcus_the_urgent_risks_of_runaway_ai_and_what_to_do_about_them/c. *See also* David Marchese, *How Do We Ensure an A.I. Future That Allows for Human Thriving?*, N.Y. TIMES MAG. (May 1, 2023), https://www.nytimes.com/interactive/2023/05/02/magazine/ai-gary-marcus.html.

³¹¹ Rocky Swift & Jason Neely, *G7 Leaders Confirm Need for Governance of Generative AI Technology*, REUTERS (May 19, 2023), https://www.reuters.com/technology/g7-leaders-confirm-need-governance-generative-ai-technology-2023-05-19/.

³¹² Brian Fung, UN Secretary General Embraces Calls for a New UN Agency on AI in the Face of 'Potentially Catastrophic and Existential Risks,' CNN (July 18, 2023), https://www.cnn.com/2023/07/18/tech/un-ai-agency/index.html.

³¹³ CHINEN, *supra* note 291, at 207.

³¹⁴ Dan Milmo & Kiran Stacey, *Rishi Sunak's AI Summit: What is its Aim, and is it Really Necessary?*, GUARDIAN (June 9, 2023), https://www.theguardian.com/technology/2023/jun/09/rishi-sunak-ai-summit-what-is-its-aim-and-is-it-really-necessary. Stephen Bush, *Sunak's AI Summit Succeeded, but not in the Way the UK Hoped*, FIN. TIMES (Nov. 3, 2023), https://www.ft.com/content/7b8e27a5-3eec-4e52-a79e-89ba9802e288. Rishi Sunak, Prime Minister, U.K. Speech at the AI Safety Summit (Nov. 2, 2023) (transcript available at https://www.gov.uk/government/speeches/prime-ministers-speech-at-the-ai-safety-summit-2-november-2023) [hereinafter U.K. Prime Minister's AI Safety Summit Speech].

AI³¹⁵ as articulated in the "landmark" Bletchley Declaration.³¹⁶ For U.K. Prime Minister Rishi Sunak,

[W]e agreed and published the first ever international statement about the nature of all those risks [concerning AI]. It was signed by every single nation represented at this summit covering all continents across the globe...and including the US and China. Some said, we shouldn't even invite China...others that we could never get an agreement with them. Both were wrong. A serious strategy for AI safety has to begin with engaging all the world's leading AI powers.³¹⁷

But there is one caveat: "Because AI is a multi-faceted capability, "one-size-fits all" regulation will over-regulate in some instances and under-regulate in others." The lack of concreteness or at least legislation, leaves the field empty for non-mandatory, consensus-based guidelines, principles, framework or other loose (or more likely, non-) enforcement. 319

The U.S. government must pass legislation that implements a comprehensive national strategy for both the private and public sectors concerning AI, creates a strong set of enforceable regulations for the research and development of the field, and rigorously promotes international partnerships with like-minded countries³²⁰ and their corporations. Some worry that this may be too little, too late:

The upshot may well be an AI future in which the United States' and Europe's painstaking agreements on safe, rights-respecting AI are rendered obsolete by a world already hardwired with Chinese AI systems—winning Beijing favor among non-Western nations and setting de facto authoritarian standards for the technology's

³¹⁵ Press Release, Prime Minister's Off., et al, Countries Agree to Safe and Responsible Development of Frontier AI in Landmark Bletchley Declaration (Nov. 1, 2023), https://www.gov.uk/government/news/countries-agree-to-safe-and-responsible-development-of-frontier-ai-in-landmark-bletchley-declaration.

³¹⁶ Owen Hughes, *UK AI Safety Summit: Global Powers Make 'Landmark' Pledge to AI Safety*, TECHREPUBLIC (Nov. 2, 2023), https://www.techrepublic.com/article/uk-ai-safety-summit/.

³¹⁷ U.K. Prime Minister's AI Safety Summit Speech, *supra* note 314.

³¹⁸ Wheeler, *supra* note 35.

³¹⁹ MARK W. JANIS, LEILA NADYA SADAT & JOHN E. NOYES, INTERNATIONAL LAW: CASES AND COMMENTARY 187 (6th ed. 2020) ("Softlaw may take a variety of forms in addition to declarations emanating from international conferences such as the Earth Summit. Other examples include memoranda of understanding, most resolutions of international organizations...and codes of conduct.").

³²⁰ Alex Engler, *The EU and U.S. are Starting to Align on AI Regulation*, BROOKINGS INST. (Feb. 1, 2022), https://www.brookings.edu/articles/the-eu-and-u-s-are-starting-to-align-on-airegulation/.

development globally.321

In the end, John C. Reitz warns us that "good comparatists should be sensitive to the ever present limitations on information available about foreign legal systems and should qualify their conclusions if they are unable to have access to sufficient information or if they have reason to suspect that they are missing important information." When it comes to the black box that is China's legal system, it is clear we need much more information to understand how the principles and measures announced to date will work together with current laws in force. Maybe by the time we figure out how AI guidelines work in China, the U.S. will have come up with some legislation that may actually pass Congress and get signed into law by the President.

³²¹ Drexel & Kelly, *supra* note 86.

³²² Reitz, *supra* note 51, at 631.

³²³ Mimi Lau & Echo Xie, *How China's Supreme Court Tried to Open Up the Legal 'Black Box' to Let in the Light*, S. CHINA MORNING POST (Mar. 26, 2021), https://www.scmp.com/news/china/politics/article/3127001/how-chinas-supreme-court-tried-open-legal-black-box-let-light; Jerome A. Cohen & Chi Yin, *The Complexities of China's Struggle for Justice*, DIPLOMAT (May 12, 2022), https://thediplomat.com/2022/05/the-complexities-of-chinas-struggle-for-justice/.