

Federal Register

Vol. 88, No. 210

Wednesday, November 1, 2023

Presidential Documents

Relevant text is highlighted on page two.

Title 3—

The President

Executive Order 14110 of October 30, 2023

Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence

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

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

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

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

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

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

- do this work solely for the purposes of guarding against these threats, and shall also develop model guardrails that reduce such risks. The Secretary shall, as appropriate, consult with private AI laboratories, academia, civil society, and third-party evaluators, and shall use existing solutions.
- 4.2. Ensuring Safe and Reliable AI. (a) Within 90 days of the date of this order, to ensure and verify the continuous availability of safe, reliable, and effective AI in accordance with the Defense Production Act, as amended, 50 U.S.C. 4501 *et seq.*, including for the national defense and the protection of critical infrastructure, the Secretary of Commerce shall require:
 - (i) Companies developing or demonstrating an intent to develop potential dual-use foundation models to provide the Federal Government, on an ongoing basis, with information, reports, or records regarding the following:
 - (A) any ongoing or planned activities related to training, developing, or producing dual-use foundation models, including the physical and cybersecurity protections taken to assure the integrity of that training process against sophisticated threats;
 - (B) the ownership and possession of the model weights of any dualuse foundation models, and the physical and cybersecurity measures taken to protect those model weights; and
 - (C) the results of any developed dual-use foundation model's performance in relevant AI red-team testing based on guidance developed by NIST pursuant to subsection 4.1(a)(ii) of this section, and a description of any associated measures the company has taken to meet safety objectives, such as mitigations to improve performance on these red-team tests and strengthen overall model security. Prior to the development of guidance on red-team testing standards by NIST pursuant to subsection 4.1(a)(ii) of this section, this description shall include the results of any red-team testing that the company has conducted relating to lowering the barrier to entry for the development, acquisition, and use of biological weapons by non-state actors; the discovery of software vulnerabilities and development of associated exploits; the use of software or tools to influence real or virtual events; the possibility for self-replication or propagation; and associated measures to meet safety objectives; and
 - (ii) Companies, individuals, or other organizations or entities that acquire, develop, or possess a potential large-scale computing cluster to report any such acquisition, development, or possession, including the existence and location of these clusters and the amount of total computing power available in each cluster.
- (b) The Secretary of Commerce, in consultation with the Secretary of State, the Secretary of Defense, the Secretary of Energy, and the Director of National Intelligence, shall define, and thereafter update as needed on a regular basis, the set of technical conditions for models and computing clusters that would be subject to the reporting requirements of subsection 4.2(a) of this section. Until such technical conditions are defined, the Secretary shall require compliance with these reporting requirements for:
 - (i) any model that was trained using a quantity of computing power greater than 10^{26} integer or floating-point operations, or using primarily biological sequence data and using a quantity of computing power greater than 10^{23} integer or floating-point operations; and
 - (ii) any computing cluster that has a set of machines physically co-located in a single datacenter, transitively connected by data center networking of over 100 Gbit/s, and having a theoretical maximum computing capacity of 10²⁰ integer or floating-point operations per second for training AI.
- (c) Because I find that additional steps must be taken to deal with the national emergency related to significant malicious cyber-enabled activities declared in Executive Order 13694 of April 1, 2015 (Blocking the Property of Certain Persons Engaging in Significant Malicious Cyber-Enabled Activities), as amended by Executive Order 13757 of December 28, 2016 (Taking