Week 13: Policy, Regulation and Ethical Considerations

THE WHITE HOUSE



Administration The Record Briefing Room Vis

OCTOBER 30, 2023

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

▶ BRIEFING ROOM ▶ PRESIDENTIAL ACTIONS

Annya Dahmani Nov 25, 2024 V&L Seminar

President Biden issued an Executive Order to "ensure that America leads the way in seizing the promise and managing the risks of Al"





Sections in the EO

- 1. Purpose
- 2. Policy and Principles
- 3. Definitions
- 4. Ensuring the Safety and Security of Al Technology
- 5. Promoting Innovation and Competition
- 6. Supporting Workers
- 7. Advancing Equity and Civil Rights
- 8. Protecting Consumers, Patients, Passengers, and Students
- 9. Protecting Privacy
- 10. Advancing Federal Government Use of Al
- 11. Strengthening American Leadership Abroad
- 12. Implementation
- 13. General Provisions

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Key Al actions following the executive order

Discussion points

- 1. Definitions
- Red teaming
- 3. Innovation & regulation
- 4. Supporting workers
- 5. Trump administration
- 6. Concluding discussion points

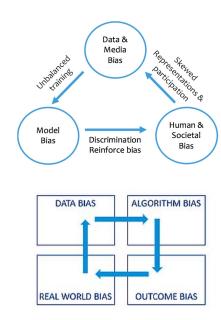
Purpose: Harnessing AI for good and realizing its benefits requires mitigating its substantial risks

"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."

Responsible AI = solve urgent challenges while making world more prosperous, productive, innovative, secure

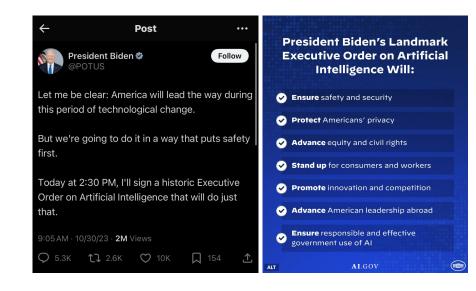
Irresponsible AI = exacerbate societal harms (fraud, discrimination, bias, disinformation), displace and disempower workers, competition, national security risks

"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."



Policy and Principles Lays out 8 guiding principles for federal agencies to follow

- 1. Al must be safe and secure
- 2. Innovation, competition, and collaboration
- 3. Commitment to supporting American workers
- 4. Al must advance equity and civil rights
- 5. American consumers must be protected
- 6. Americans' privacy and civil liberties must be protected as AI continues advancing
- 7. Increase Federal Government's capacity to regulate, govern, & support responsible Al
- 8. Federal government should lead the way to global societal, economic, and technological progress



Definitions

- Agency
- 2. Artificial Intelligence (AI)
- 3. Al Model
- 4. Al Red-Teaming
- 5. Al System
- 6. Commercially Available Information
- 7. Crime Forecasting
- 8. Critical and Emerging Technologies
- 9. Critical Infrastructure
- 10. Differential-Privacy Guarantee
- 11. Dual-Use Foundation Model
- 12. Federal Law Enforcement Agency
- 13. Floating-Point Operation
- 14. Foreign Person
- 15. Foreign Reseller
- 16. Generative Al

- 17. Infrastructure as a Service (laaS)
- 18. Integer Operation
- 19. intelligence Community
- 20. Machine Learning
- 21. Model Weight
- 22. National Security System
- 23. Omics
- 24. Open RAN
- 25. Personally Identifiable Information (PII)
- 26. Privacy-Enhancing Technology (PET)
- 27. Privacy Impact Assessment
- 28. Sector Risk Management Agency
- 29. Self-Healing Network
- 30. Synthetic Biology
- 31. Synthetic Content
- 32. Testbed
- 33. Watermarking

Definitions

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

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

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

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

- (i) substantially lowering the barrier of entry for non-experts to design, synthesize, acquire, or use chemical, biological, radiological, or nuclear (CBRN) weapons:
- (ii) enabling powerful offensive cyber operations through automated vulnerability discovery and exploitation against a wide range of potential targets of cyber attacks;
- or (iii) permitting the evasion of human control or oversight through means of deception or obfuscation.

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

Discussion

Are there any terms you think should have been included or defined differently? How do the definitions affect governance efforts? Who should be defining these terms?

1.	Agency	17.	Infrastructure as a Service (IaaS)
2.	Artificial Intelligence (AI)	18.	Integer Operation
3.	Al Model	19.	intelligence Community
4.	Al Red-Teaming	20.	Machine Learning
5.	Al System	21.	Model Weight
6.	Commercially Available Information	22.	National Security System
7.	Crime Forecasting	23.	Omics
8.	Critical and Emerging Technologies	24.	Open RAN
9.	Critical Infrastructure	25.	Personally Identifiable Information (PII
10.	Differential-Privacy Guarantee	26.	Privacy-Enhancing Technology (PET)
11.	Dual-Use Foundation Model	27.	Privacy Impact Assessment
12.	Federal Law Enforcement Agency	28.	Sector Risk Management Agency
13.	Floating-Point Operation	29.	Self-Healing Network
14.	Foreign Person	30.	Synthetic Biology
15.	Foreign Reseller	31.	Synthetic Content
16.	Generative AI	32.	Testbed
		33.	Watermarking

New standards for Al Safety and Security

Require that developers of the most powerful Al systems share their safety test results and other critical information with the U.S. government

"In accordance with the Defense Production Act, the Order will require that companies developing any foundation model that poses a serious risk to national security, national economic security, or national public health and safety must notify the federal government when training the model, and must share the results of all red-team safety tests. These measures will ensure AI systems are safe, secure, and trustworthy before companies make them public."

Develop standards, tools, and tests to help ensure that Al systems are safe, secure, and trustworthy

"The National Institute of Standards and Technology will set the rigorous standards for extensive red-team testing to ensure safety before public release. The Department of Homeland Security will apply those standards to critical infrastructure sectors and establish the AI Safety and Security Board. The Departments of Energy and Homeland Security will also address AI systems' threats to critical infrastructure, as well as chemical, biological, radiological, nuclear, and cybersecurity risks. Together, these are the most significant actions ever taken by any government to advance the field of AI safety."

Red teaming discussion

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

Are there other ways to audit models besides AI red-teaming. How do we ensure that AI red-teaming is done in a comprehensive manner?

- Nandeeka

Some other things that can be discussed wrt red teaming

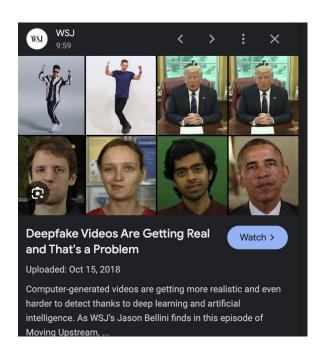
- 1. What types of undesirable behaviors, limitations, and risks can or should be effectively caught and mitigated through red-teaming exercises?
- aside from Al developers, who else should be at the table, and what resources should be available to them?
- 3. How should the risks identified through red-teaming be documented, reported, and managed?
- 4. Is red-teaming on its own sufficient for assessing and managing the safety, security, and trustworthiness of AI? If not, what other practices should be part of the broader evaluation toolbox, and how does red-teaming complement those approaches?

Protect against the risks of using AI to engineer dangerous biological materials

New standards for Al Safety and Security: Watermarking

Protect Americans from Al-enabled fraud and deception by establishing standards and best practices for detecting Al-generated content and authenticating official content

"The Department of Commerce will develop guidance for content authentication and watermarking to clearly label AI-generated content. Federal agencies will use these tools to make it easy for Americans to know that the communications they receive from their government are authentic—and set an example for the private sector and governments around the world."



New standards for Al Safety and Security:

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

- (A) any ongoing or planned activities related to training, developing, or producing dual-use foundation models, including the physical and cybersecurity protections taken to assure the integrity of that training process against sophisticated threats;
- (B) the ownership and possession of the model weights of any dual-use foundation models, and the physical and cybersecurity measures taken to protect those model weights; and
- (C) the results of any developed dual-use foundation model's performance in relevant Al red-team testing based on guidance developed by NIST

New standards for Al Safety and Security:

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.

any model that was trained using a quantity of computing power greater than 10²⁶ integer floating-point operations, or using primarily biological sequence data and using a quantity of computing power greater than 10²³ integer or floating-point operations; and

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

2.3 A MISPLACED FOCUS ON FLOPS

FLOPs. Floating point operations. The cumulative number of floating point operations (e.g., 3.5 x 7.1) used during model training. Not to be confused with floating point operations *per second (FLOPS, with a capital S)*.

Definitions of foundation and frontier models (see Table 1) include regulatory thresholds defined by cumulative training FLOPs. These numbers have no basis in outcomes or technical reality, as we demonstrate in the following section. 10^{26} FLOPs appeared as an arbitrary FLOPs threshold in the October 2023 Biden Administration Executive Order.

Promoting innovation and competition

Encourages innovation through:

- Streamlined visa and immigration processes for Al talent
- Promote a fair, open, and competitive Al ecosystem

by providing small developers and entrepreneurs access to technical assistance and resources, helping small businesses commercialize AI breakthroughs, and encouraging the Federal Trade Commission to exercise its authorities

About the

 Expanding AI research funding (through the National AI Research Resource—a to will provide AI researchers and students to key AI resources and data)



Home / Our Focus Areas / Artificial Intelligence / National Artificial Intelligence Research Resource Pilot

About the NAIRR pilot

The NAIRR is a concept for a national infrastructure that connects U.S. researchers to computational, data, software, model and training resources they need to participate in AI research.

The NAIRR pilot, as directed in the Executive Order on the Safe, Secure and Trustworthy.

Development and Use of Artificial Intelligence, is a proof-of-concept for the eventual full-scale NAIRR.

The pilot will focus on supporting research and education across the nationwide research community, while gaining insights that will refine the design of a full NAIRR.

The NAIRR pilot will run for two years, beginning January 24, 2024. The pilot will broadly support fundamental, translational and use-inspired Al-related research with particular emphasis on societal challenges. Initial priority topics include safe, secure and trustworthy Al; human health; and environment and infrastructure. A broader array of priority areas will be supported as the pilot progresses. The pilot will also support educators to train students on responsible use and development of Al technologies by providing access to infrastructure and training resources.

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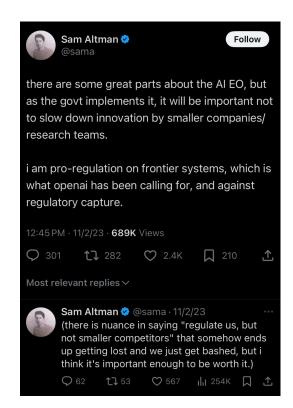
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Discussion on innovation Balancing innovation and regulation?

How can the government implement testing requirements without stifling innovation or creating excessive regulatory burden for smaller Al companies and startups? – **Anish**

There is a valid concern that an attempt to regulate AI may not empower research to get more cutting edge results, how will we be competing with near peer adversary countries when the sky may be the limit in their AI development paradigm. – **Jerome**

How can the Federal Government effectively balance the promotion of AI innovation and competition while ensuring the safety and reliability of AI systems, in order to prevent overregulation that may stifle technological advancement and to foster a diverse and inclusive AI ecosystem? – Junyi





Protecting Americans' Privacy

- Protect Americans' privacy by prioritizing federal support for accelerating the development and use of privacy-preserving techniques
- Strengthen privacy-preserving research and technologies
- Evaluate how agencies collect and use commercially available information

Advancing Equity and Civil Rights

To ensure that AI advances equity and civil rights, the President directs the following additional actions:

- Provide clear guidance to landlords, Federal benefits programs, and federal contractors to keep Al
 algorithms from being used to exacerbate discrimination.
- Address algorithmic discrimination through training, technical assistance, and coordination between the Department of Justice and Federal civil rights offices on best practices for investigating and prosecuting civil rights violations related to AI.
- Ensure fairness throughout the criminal justice system by developing best practices on the use of Al
 in sentencing, parole and probation, pretrial release and detention, risk assessments, surveillance,
 crime forecasting and predictive policing, and forensic analysis.



Advancing Equity and Civil Rights

"Irresponsible uses of AI can lead to and deepen discrimination, bias, and other abuses in justice, healthcare, and housing. The Biden-Harris Administration has already taken action by publishing the Blueprint for an AI Bill of Rights and issuing an Executive Order directing agencies to combat algorithmic discrimination, while enforcing existing authorities to protect people's rights and safety."



BLUEPRINT FOR AN AI BILL OF RIGHTS

MAKING AUTOMATED SYSTEMS WORK FOR THE AMERICAN PEOPLE

"Irresponsible uses of AI can lead to and deepen discrimination, bias, and other abuses in justice, healthcare, and housing. The Biden-Harris Administration has already taken action by publishing the Blueprint for an AI Bill of Rights and issuing an Executive Order directing agencies to combat algorithmic discrimination, while enforcing existing authorities to protect people's rights and safety."



Safe and Effective Systems



Algorithmic
Discrimination
Protections



Data Privacy



Notice and **Explanation**



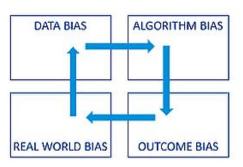
Human
Alternatives,
Consideration, and
Fallback

Advancing Equity and Civil Rights

Focuses on addressing algorithmic discrimination:

- Provide clear guidance to landlords, Federal benefits programs, and federal contractors to keep Al algorithms from being used to exacerbate discrimination
- Promoting fairness in hiring, housing, and access to services
- Fairness in criminal justice (sentencing, parole, probation, etc)





Standing Up for Consumers, Patients, and Students

To protect consumers while ensuring that AI can make Americans better off, the President directs the following actions:

- Advance the responsible use of AI in healthcare and the development of affordable and life-saving drugs.
- Shape Al's potential to transform education by creating resources to support educators deploying Al-enabled educational tools, such as personalized tutoring in schools.

Supporting Workers

Al is changing America's jobs and workplaces, offering both the promise of improved productivity but also the dangers of increased workplace surveillance, bias, and job displacement

- Develop principles and best practices to mitigate the harms and maximize the benefits of AI for workers by addressing job displacement; labor standards; workplace equity, health, and safety
- Produce a report on Al's potential labor-market impacts, and study and identify options for strengthening federal support for workers facing labor disruptions, including from Al

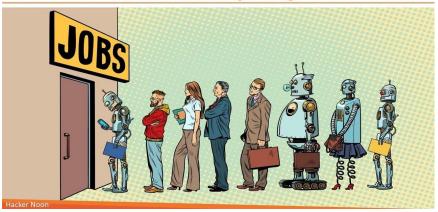
Some Professions will Fall in Decay, Others will Thrive, and Most of Them will Drastically Change



Supporting Workers

"My Administration will seek to adapt job training and education to support a diverse workforce and help provide access to opportunities that Al creates. In the workplace itself, Al should not be deployed in ways that undermine rights, worsen job quality, encourage undue worker surveillance, lessen market competition, introduce new health and safety risks, or cause harmful labor-force disruptions."

Some Professions will Fall in Decay, Others will Thrive, and Most of Them will Drastically Change



Question

I feel that there isn't much said about preventing the displacement of jobs - perhaps there is no good sense of how to help workers at risk of their jobs being automated, especially for labor-intensive ones like manufacturing warehouses whose Al counterparts are already showing signs of matching their capabilities. Additionally, Al was meant to wash our dishes and fold our laundry, and yet it came directly at our creative jobs in the last few years. How can we revert back to a point in which they carry out our labor while letting us enjoy our creative endeavors?

- Ryan

Advancing American Leadership Abroad

AI's challenges and opportunities are global. The Biden-Harris Administration will continue working with other nations to support safe, secure, and trustworthy deployment and use of AI worldwide. To that end, the President directs the following actions:

- Expand bilateral, multilateral, and multistakeholder engagements to collaborate on AI. The State Department, in collaboration, with the Commerce Department will lead an effort to establish robust international frameworks for harnessing AI's benefits and managing its risks and ensuring safety.
- Promote the safe, responsible, and rights-affirming development and deployment of AI abroad to solve global challenges, such as advancing sustainable development and mitigating dangers to critical infrastructure.

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Ensuring Responsible and Effective Government Use of Al

To ensure the responsible government deployment of AI and modernize federal AI infrastructure, the President directs the following actions:

- Issue guidance for agencies' use of AI,
- Help agencies acquire specified AI products and services faster, more cheaply, and more effectively through more rapid and efficient contracting.
- Accelerate the rapid hiring of AI professionals as part of a government-wide AI talent surge led by the Office of Personnel Management, U.S. Digital Service, U.S. Digital Corps, and Presidential Innovation Fellowship. Agencies will provide AI training for employees at all levels in relevant fields.





3 months later...

JANUARY 29, 2024

Fact Sheet: Biden-Harris Administration Announces Key AI Actions Following President Biden's Landmark Executive Order

▶ BRIEFING ROOM ▶ STATEMENTS AND RELEASES

The table below summarizes many of the activities federal agencies have completed in response to the Executive Order

Action	Agency	Required Timeline	
Evaluated ways to prioritize agencies' adoption of AI through the Technology Modernization Fund	Technology Modernization Board	30 days	COMPLETE
Directed the Nontraditional and Emerging Transportation Technology Council to evaluate the transportation sector's need for Al guidance and technical assistance	Department of Transportation	30 days	COMPLETE
Reported federal agency resources available to incorporate into the National AI Research Resource (NAIRR) pilot	Agencies identified by the National Science Foundation	45 days	COMPLETE
Identified priority areas for increasing federal agency AI talent and accelerated hiring pathways	Office of Science and Technology Policy & Office of Management and Budget	45 days	COMPLETE
Convened Al and Tech Talent Task Force	White House Chief of Staff's Office	45 days	COMPLETE
Launched an Al Talent Surge to accelerate hiring Al professionals across the federal government, including through a large-scale hiring action for data scientists	Agencies coordinating with the AI and Tech Talent Task Force	45 days	COMPLETE
Published a Request for Information (RFI) on whether to revise the list of Schedule A job classifications that do not require permanent labor certifications	Department of Labor	45 days	COMPLETE
Convened an interagency council to coordinate federal agencies' use of Al	Office of Management and Budget	60 days	COMPLETE
Reviewed the need for and granted flexible hiring authorities including direct hire and excepted service authorities for federal agencies to hire AI professionals	Office of Personnel Management	60 days	COMPLETE
Used Defense Production Act authorities to compel developers of powerful AI systems to report vital information, especially AI safety test results	Department of Commerce	90 days	COMPLETE
Proposed a draft rule that compels U.S. cloud companies that provide computing power for foreign AI training to report that they are doing so	Department of Commerce	90 days	COMPLETE
Completed risk assessments covering Al's use in every critical infrastructure sector	Sector Risk Management Agencies	90 days	COMPLETE

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Launched a pilot of the NAIRR	National Science Foundation	90 days	COMPLETE
Streamlined visa processing, including by renewing and expanding interview-waiver authorities	Department of State	90 days	COMPLETE
Established an AI Task Force to develop policies to provide regulatory clarity and catalyze AI innovation in healthcare	Department of Health and Human Services	90 days	COMPLETE
Convened federal agencies' civil rights offices to discuss the intersection of AI and civil rights	Department of Justice	90 days	COMPLETE
Directed key Federal Advisory Committees to advise on Al and transportation	Department of Transportation	90 days	COMPLETE
Launched a pooled hiring action, to accelerate federal Al hiring, by letting certain applicants apply for roles in multiple agencies with just one application	Office of Personnel Management	90 days	COMPLETE
Released a draft framework for prioritizing generative AI technologies in security authorizations for federally procured products and services	General Services Administration	90 days	COMPLETE
Announced the funding of new Regional Innovation Engines (NSF Engines), including with a focus on advancing AI	National Science Foundation	150 days	COMPLETE
Released an RFI on how federal agencies' privacy impact assessments may be more effective at mitigating privacy risks, including those that are further exacerbated by AI and other advances in technology and data capabilities.	Office of Management and Budget	180 days	COMPLETE
Established an office to coordinate development of Al and other critical and emerging technologies across the agency	Department of Energy	180 days	COMPLETE
Released for comment a draft policy on Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence	Office of Management and Budget	(none)	COMPLETE
Launched the EducateAl initiative, in order to prioritize Al-related workforce development	National Science Foundation	(none)	COMPLETE
Defined AI as a focus area for prize funds through the 2024 Growth Accelerator Fund Competition	Small Business Administration	(none)	COMPLETE
Confirmed the eligibility of Al-related expenditures for support via key programs that benefit small businesses	Small Business Administration	(none)	COMPLETE
Published an RFI on Al's implications for global development	U.S. Agency for International Development & Department of State	(none)	COMPLETE
Proposed changes to a privacy rule that would further limit companies' ability to monetize children's data, including by limiting targeted advertising	Federal Trade Commission	(none)	COMPLETE
issued an advisory opinion to highlight that false, incomplete, and old information must not appear in background check reports, including for tenant screening	Consumer Financial Protection Bureau	(none)	со310.ете

6 months later...

APRIL 29, 2024

Biden-Harris Administration Announces Key AI Actions 180 Days Following President Biden's Landmark Executive Order



"federal agencies reported that they completed all of the 180-day actions in the E.O. on schedule, following their recent successes completing each 90-day, 120-day, and 150-day action on time."

Published guidance on patentability of Al-assisted inventions	U.S. Patent and Trademark Office	120 days	COMPLETE
Launched a pilot program for a domestic visa renewals	Department of State	120 days	COMPLETE
Entered into a contract with the National Academies of Sciences, Engineering, and Medicine to conduct a study regarding AI, biological data, and biosecurity risks	Department of Defense	120 days	COMPLETE
Issued guidance on how federal agencies can use benefits, flexibilities, and incentives to attract, hire, and retain Al and Al-enabling talent	Office of Personnel Management	120 days	COMPLETE
Published information accessible on Al.gov to help experts in Al understand options for working in the United States	Department of Homeland Security	120 days	COMPLETE
Published a report with data on how experts in AI and other critical and emerging technologies have utilized the immigration system	Department of Homeland Security	120 days	COMPLETE
Evaluated steps for updating — and establishing new criteria for — the countries and skills on the Exchange Visitor Skills List, including those skills critical to the United States	Department of State	120 days	COMPLETE
Published a final memorandum with requirements and guidance for federal agencies' Al governance, innovation, and risk management	Office of Management and Budget	150 days	COMPLETE
Published a report examining Al-related cybersecurity and fraud risks and best practices for financial institutions	Department of Treasury	150 days	COMPLETE
Announced the funding of new Regional Innovation Engines (NSF Engines), including with a focus on advancing AI	National Science Foundation	150 days	COMPLETE
Released an RFI on how federal agencies' privacy impact assessments may be more effective at mitigating privacy risks, including those that are further exacerbated by AI and other advances in technology and data capabilities.	Office of Management and Budget	180 days	COMPLETE
Established an office to coordinate development of AI and other critical and emerging technologies across the agency	Department of Energy	180 days	COMPLETE
Published a final rule to strenghten the integrity of the H-1B program and enhance its use, including by experts in Al and related fields	Department of Homeland Security	180 days	COMPLETE
Published new policy guidance for international students, clarifying and modernizing this pathway for experts in Al and other critical and emerging technologies	Department of Homeland Security	180 days	COMPLETE
Incorporated NIST's AI Risk Management Framework, and other Al- related guidance, into security guidelines covering critical Infrastructure	Department of Homeland Security	180 days	COMPLETE
Piloted new AI tools to identify and close vulnerabilities in critical government systems and software	Department of Defense & Department of Homeland Security	180 days	COMPLETE
Evaluated and submitted a report to the President that discusses Al's potential to cause or exacerbate chemical, biological, radiological, and nuclear threats, as well as its ability to help counter such threats	Department of Homeland Security	180 days	COMPLETE
Developed a framework for nucleic acid synthesis screening to reduce the risk of misuse of synthetic biological products in research and development	Office of Science and Technology Policy	180 days	COMPLETE
Launched an effort to engage the nucleic acid synthesis industry on necessary technical implementation details to facilitate adoption of the screening framework established per the Executive Order	Department of Commerce	180 days	COMPLETE
Established a training program to help industry and domestic law enforcement better understand and respond to Al-related IP theft	Department of Homeland Security	180 days	COMPLETE
increased information sharing related to Al technology theft, Al- enabled IP theft, and Al-enabled digital piracy with state, local, and international law enforcement, including the European Union Intellectual Property Office, Interpol, and Europol	Department of Homeland Security	180 days	COMPLETE

Dedicated personnel to collect, analyze, and investigate Al-enabled digital piracy and continued to investigate theft of Al IP and trade secrets, as well as insider threats	Department of Homeland Security	180 days	COMPLETE
pecrets, as well as insider (threats) Published a report on Al's potential to improve planning, permitting, investment, and operations for electric grid infrastructure and to enable clean power provision	Department of Energy	180 days	COMPLETI
Developed AI tools and tools to facilitate building foundation models that can advance basic and applied science	Department of Energy	180 days	COMPLETI
Collaborated with private-sector actors to develop AI tools that can address climate change and other challenges	Department of Energy	180 days	COMPLETI
Launched partnerships to expand the use of Department of Energy testbeds and computing capabilities for new applications in science, energy, and national security	Department of Energy	180 days	COMPLETE
Authored a report on Al's potential role to help tackle major societal challenges	President's Council of Advisors on Science and Technology	180 days	COMPLETI
Submitted a report to the President on Al's labor-market effects	Council of Economic Advisors	180 days	COMPLETI
Submitted a report to the President evaluating policy options for supporting workers displaced by the adoption of A1 and other technologies – including assessments of current and former federal programs	Department of Labor	180 days	COMPLETE
Developed principles and best practices for employers and developers to develop and deploy workplace uses of AI in ways that are safe and empower workers	Department of Labor	180 days	COMPLET
Identified — and shared with appropriate agencies — best practices for federal law enforcement agencies to hire professionals with technical skills and train professionals in the responsible use of AI	Office of Personnel Management	180 days	COMPLETI
Published a plan that addresses the use of Al and automated systems by states and localities in public benefits administration	Department of Health and Human Services	180 days	COMPLETE
Issued guidance to state, local, territorial, and Tribal governments addressing the use of AI and automated systems in public benefits administration	Department of Agriculture	180 days	COMPLET
Published guidance on the application of nondiscrimination laws to advertisements of housing-related transactions on digital platforms, including through the use of algorithms	Department of Housing and Urban Development	180 days	COMPLETI
Published guidance on the use of tenant screening systems including ones that use algorithms in ways that avoid unlawful	Department of Housing and Urban Development	180 days	COMPLETE
Developed a strategy for ensuring the safety and effectiveness of Al deployed in the health care sector	Department of Health and Human Services	180 days	COMPLETE
Announced a new final rule and engaged with health care providers to affirm and promote understanding of federal nondiscrimination laws applicable to health care, including as related to AI	Department of Health and Human Services	180 days	COMPLET
Directed further exploration — including future public consultation — of Al's challenges and opportunities related to transportation	Department of Transportation	180 days	COMPLETE
Developed guidance on the use of generative AI by the federal workforce	Office of Personnel Management	180 days	COMPLETI
Created a resource guide for federal AI acquisition	General Services Administration	180 days	COMPLETI
Submitted a report to the President on progress made and recommendations for increasing AI capacity	Al and Tech Talent Task Force	180 days	COMPLETE
Established guidance for skills-based Al-related hiring	Office of Personnel Management	180 days	COMPLETE
Established an interagency working group to facilitate federal Al- related hiring	Office of Personnel Management	180 days	COMPLETI

Office of Personnel Management	180 days	COMPLETE
Office of Personnel Management	180 days	COMPLETE
Department of Defense	180 days	COMPLETE
Department of Labor	365 days	COMPLETE
Department of Labor	(none)	COMPLETE
Department of Homeland Security	(none)	COMPLETE
Equal Employment Opportunity Commission	(none)	COMPLETE
Office of Management and Budget	(none)	COMPLETE
National Science Foundation	(none)	COMPLETE
Small Business Administration	(none)	COMPLETE
Small Business Administration	(none)	COMPLETE
U.S. Agency for International Development & Department of State	(none)	COMPLETE
U.S. Agency for International Development & Department of State	(none)	COMPLETE
Department of Homeland Security	(none)	COMPLETE
Federal Trade Commission	(none)	COMPLETE
Federal Trade Commission	(none)	COMPLETE
Consumer Financial Protection Bureau	(none)	COMPLETE
	Office of Personnel Management Department of Labor Department of Homeland Security Equal Employment Opportunity Commission Office of Management and Budget National Science Foundation Small Business Administration Small Business Administration U.S. Agency for International Development & Department of State U.S. Agency for International Development & Department of State U.S. Agency for International Development & Department of State Topartment of Homelands Security Federal Trade Commission	Department of Defense 180 days Department of Defense 180 days Department of Labor 365 days Department of Labor (none) Department of Homeland Security (none) Equal Employment Opportunity (none) Equal Employment Opportunity (none) Office of Management and Budget (none) National Science Foundation (none) Small Business Administration (none) Small Business Administration (none) U.S. Agency for International Development & Department of State U.S. Agency for International Development & Department of State Department of Homeland Security (none) Pederal Trade Commission (none)

*Actions added to the summary table since its publication on March 28 are **bolded**.

What next?



BY MATT O'BRIEN AND BARBARA ORTUTAY

Updated 4:39 PM PST, November 20, 2024

SAN FRANCISCO (AP) — President-elect Donald Trump <u>has vowed to repeal</u> President Joe Biden's signature artificial intelligence policy when he returns to the White House for a second term.

What that actually means for the future of AI technology remains to be seen. Among those who could use some clarity are the government scientists and AI experts from multiple countries gathering in San Francisco this week to deliberate on AI safety measures.

Trump promised in his presidential campaign platform to "repeal Joe Biden's dangerous Executive Order that hinders Al Innovation, and imposes Radical Leftwing ideas on the development of this technology."

But he hasn't made clear what about the order he dislikes or what he'd do about the Al Safety Institute. Trump's transition team didn't respond to emails this week seeking comment.

Would these guidelines change under the Trump administration or with Elon Musk? xAl's Grok has been noted to generate harmful content more easily than models from other companies. One of my friends in xAl mentioned that xAl prioritizes catching up with OpenAl over current safety concerns and Elon does not seem to put emphasis on safety so much. Furthermore, Elon has been critical of models tuned so that the models hold liberal people's opinions.

Could the upcoming shift in leadership could potentially lead to a reevaluation of priorities? – Kazusato

Conclusion/Takeaways

- This executive order set a framework for safe, secure, and trustworthy development and use of AI
- Collaboration, innovation, and safeguards must work in tandem
- Role of government, private sector, academia is crucial



Concluding Discussion Questions

What sections of the Executive Order do you think are effective/promising? Are there any sections you find lacking or areas where it could be improved? Is anything missing?

- 1. Given the Executive Order's emphasis on safeguarding privacy and addressing Al-related risks, what role should international collaboration play in establishing standardized guidelines for Al governance, and how might differing global privacy laws impact this effort? **Baifeng**
- 2. While this executive order has not mentioned anything about open models, I wonder whether open models would help achieve the standards proposed, such as privacy and safety. **Brandon**
- 3. There seems to be an interesting focus on "biological sequence data", even though there are many other types of training data that could lead to harmful AI systems (e.g trained on radioactive materials databases, etc.). I wonder why this focus/wording was chosen that way. **Sanjeev**
- 4. How might the Federal Government address potential conflicts of interest or "revolving door" dynamics between policymakers, regulators, and private Al companies, ensuring that regulations are both robust and free from undue influence by industry stakeholders? **Jerome**