

## Law & Algorithms Assignment 1: Implementing the AI Executive Order

*Due before class on February 8*

### **Background:**

On November 1, 2023, President Biden issued [Executive Order 14,110](#), addressing the “Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence,” now being shorthanded in most places as the “AI Executive Order.” This was the third in a series of big-picture guidance documents addressing the development of automated systems, following on the October 2022 [Blueprint for an AI Bill of Right](#) issued by the White House Office of Science and Technology Policy (OSTP), and the January 2023 [AI Risk Assessment Framework](#) developed by the National Institute of Standards and Technology (NIST). While none of these documents create new binding regulation on technology developers, they all speak to the priorities and allocation of governmental resources in the regulation of those technologies.

And while this focus on “AI” is no doubt spurred by the national attention on machine learning and large language models, these documents look more broadly at all computational systems used in prediction or decisionmaking. The AI Executive Order borrows its definition of “artificial intelligence” from the 2020 [National Artificial Intelligence Initiative Act](#) as:

a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence systems use machine- and human-based inputs to perceive real and virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action.

This assignment focuses on [Section 10 of the Executive Order](#), which focuses on the algorithmic systems developed or deployed internally in the federal government. This section instructs the Director of the Office of Management and Budget to chair a committee of agency representatives that will then issue guidance to all federal agencies “to strengthen the effective and appropriate use of AI, advance AI innovation, and manage risks from AI in the Federal Government.” This includes, among other things:

- A set of minimum risk management practices for uses of AI that “impact people’s rights or safety.” These are to be drawn from the OSTP Blueprint and the NIST AI Risk Management Framework, including where appropriate: “conducting public consultation; assessing data quality; assessing and mitigating disparate impacts and algorithmic discrimination; providing notice of the use of AI; continuously

monitoring and evaluating deployed AI; and granting human consideration and remedies for adverse decisions made using AI.” (§ 10.1(b)(iv).)

- A list of specific government uses of AI that are “presumed by default to impact rights or safety,” and thus be subject to the risk management practices above. (§ 10.1(b)(v).)
- “[R]ecommendations to agencies to reduce barriers to the responsible use of AI,” including any infrastructure, budgetary, and other restrictions that would otherwise hinder adoption. (§ 10.1(b)(vi).)
- Recommendations for specific accountability mechanisms in AI systems, including “testing and safeguards against discriminatory, misleading, inflammatory, unsafe, or deceptive outputs,” “documentation and oversight of procured AI,” and “training on AI in accordance with the principles set out in this order.” (§§ 10.1(b)(viii)(B), (F), (I).)

**Assignment:**

Your team serves as staff advisors to OMB Director Shalanda Young, who will be chairing the committee that develops the recommendations in Section 10 of the AI executive order.

Director Young has decided to begin the committee’s work by asking them prioritize the following general issues:

- What risk mitigation practices they will propose for government uses of AI that “impact people’s rights or safety.” For now, they will focus on the concerns around (1) data quality in AI, (2) the appropriate notice agencies should give about the use of AI, and (3) where to allow for human consideration in automated systems;
- Which government uses should be “presumed by default to impact rights or safety;”
- Which accountability mechanisms to propose for AI systems used by the government, and specifically for now (1) what documentation and oversight to require of AI systems, and (2) what training to give those who are using AI systems.

For all of these, Director Young would like you to consider “AI” as the Executive Order defines it—that is, essentially any automated computation system that is used for prediction, recommendation, or decision making.

She is also mindful of the instruction to “reduce barriers to the responsible use of AI,” and would like to focus on recommendations and mechanisms that would (in your judgment) be feasible to adopt within the current budgets of federal agencies and in the next year or two.

Specifically, Director Young would like you to prepare a memorandum that:

1. Briefs her and the other members of the committee on how to approach the three issue areas that Director Young has decided to prioritize above, including:
  - a. What the committee should understand about how computational systems are constructed, where data may be gathered from, and how issues can arise with the construction of these systems;
  - b. What the committee should know about how human administrators may respond to working with computational systems, and what notices, documentation, or training would be effective; and
  - c. Where your team believes human decision-makers should be embedded alongside computational systems to minimize potential harms.
2. Shares your view on how the committee should instruct agencies to prioritize the implementation of recommendations and accountability mechanisms, including:
  - a. Which government uses should be presumed to impact people’s rights or safety;
  - b. How the government should approach the question of “fairness” of AI systems, including how notions of fairness can be tested within the system.
  - c. Any initial recommendations you have for the committee on risk mitigations or accountability mechanisms that will specifically address the three issue areas prioritized above.

Your submission should be between 2000–2500 words, citations excluded. Please email your team’s submission as a PDF file to the course instructors ([sellars@bu.edu](mailto:sellars@bu.edu) and [varia@bu.edu](mailto:varia@bu.edu)). We expect submissions to engage with the readings from classes 1–3, as well as the background provided above. You may also draw from external sources, including the OSTP AI Bill of Rights and the NIST AI Risk Assessment Framework.

Please review [section 10 of the syllabus](#) for our expectations for team collaboration for this and other assignments. Our grading rubric for this assignment will assess:

- Whether the memorandum provides a thoughtful response to the prompts above in a manner that is accessible to the target audience and that considers the background and context of the assignment, the risks and tradeoffs inherent in the team's recommendations, and any other information that would be relevant to the committee.
- Whether the memorandum provides clear recommendations and suggestions for prioritization, and provides a persuasive argument that defends their policy choices to the committee with citations provided to support and augment your commentary.
- Whether the memorandum engages with the course readings and discussion, especially those for classes 1-3.