Policymakers Focusing in on Artificial Intelligence

October 10, 2018

Introduction

Following a series of recent events involving policymakers from Trump's Administration and Capitol Hill, artificial intelligence (AI) was the second hottest topic in D.C. These events, described in detail below, demonstrated that policymakers are moving to the next phase of policy issues related to the further development and integration of AI into society. From the 2016 reports issued under the Obama Administration, to a White Paper issued by one of the key congressional committees, to a call by key senators to have the federal government engage its ability to help advance technology, Washington continues to develop a path forward on AI and the role of government. Below is a short summary on each of these events along with a hyperlink to each report.

A. Rise of the Machines

On September 25, Reps. Will Hurd (R-TX) and Robin Kelly (D-IL), in their capacity as Chairman and Ranking Member of the Subcommittee on Information Technology of the Committee on Oversight and Government Reform, released a white paper entitled Rise of the Machines: Artificial Intelligence and its Growing Impact on U.S. Policy. The paper is the result of a series of hearings on AI held by the Subcommittee over the past year.

• Recommendations:

  – Technical goals:

    • Government should assess the risks to public safety and consumers to develop the appropriate regulatory framework that promotes innovation but combats such risks.

    • National Institute of Standards and Technology (NIST), and private entities such as the Institute of Electrical and Electronics Engineers (IEEE), should work to develop a standard, and the federal government should work with these entities to develop standards to address safety and security of AI products.
• Government should release non-sensitive government data sets that could help researchers studying AI.

• Government should promote competitions like the Defense Advanced Research Projects Agency's (DARPA)'s Grand Challenges focused on using data to solve problems.

• Government should provide greater financial support for research and development to federal agencies and academic institutions not only to advance AI, but to help build a workforce in AI.

  – Policymakers goals:

  • Workforce challenges – Economic policies need to take into account the "uncertain future of work faced by Americans as AI takes hold." Federal, state and local agencies need to engage with educators, employers, unions, and other stakeholders to develop effective strategies for education and training.

  • Privacy – The collection and use of data in AI systems raises legitimate privacy concerns, and there should be a review of existing privacy laws, regulations and court decisions to determine where there are gaps that need to be addressed.

  • Biases – AI is reliant on large data and if the data is incomplete, biased or skewed, the AI system will be inaccurate. Bias can be addressed by ensuring transparency of the AI system through inspection and accountability; the report encourages government to employ such strategies.

  • Malicious Use of AI – While the report does not provide recommendations, it notes the importance of government anticipating the potential harm and mitigating against it.

B. National Science Foundation Strategic Plan

On September 26, the National Science Foundation (NSF), on behalf of the National Science and Technology Council’s (NSTC) Select Committee on Artificial Intelligence (Select Committee), issued a Request for Information on updating the National Artificial Intelligence Research and Development Strategic Plan to reflect the current priorities regarding the six strategic aims of the plan. Those strategy goals are:

• Make long-term investments in AI research.

• Develop effective methods for human-AI collaboration.

• Understand and address the ethical, legal and societal implications of AI.

• Ensure the safety and security of AI systems.

• Develop shared public datasets and environments for AI training and testing.

• Measure and evaluate AI technologies through standards and benchmarks.

• Better understand the national AI research and development workforce needs.

Comments are due by October 26.
C. Artificial Intelligence in Government Act

On September 26, Senators Gardner (R-CO), Schatz (D-HI), Portman (R-OH), and Harris (D-CA) introduced the “Artificial Intelligence in Government Act” legislation that would seek to promote the use of artificial intelligence by the federal government through increased executive agency coordination through an advisory board and development of a strategy for investing and deploying AI as part of the federal government. Key points include:

- Expand an office within the General Services Administration to provide technical expertise to relevant government agencies; conduct forward-looking, original research on federal AI policy; and promote U.S. competitiveness through agency and industry cooperation.
- Establish an advisory board to address AI policy opportunities and challenges for executive agencies.
- Direct the Office of Management and Budget to establish a strategy for investing and using AI as part of the federal data strategy.
- Direct the Office of Personnel Management to identify skills and competencies for AI, and establish a new or update an existing occupational series.

Conclusion

These announcements demonstrate that federal policymakers continue to recognize the need to proactively engage in a more concrete way to incorporate AI into society, as they prepare for the beginning of a new Congress in 2019. These efforts highlight opportunities, such as funding for research and development and opportunities for all stakeholders to engage in shaping the AI future, are occurring in tandem with an increased interest, on the part of policymakers, in advancing investments and opportunities for quantum computing initiatives, which will be essential to long term breakthroughs in AI (the Senate Energy and Natural Resources Committee was the most recent congressional committee to hold a hearing on the topic). There is also a need amongst policymakers to address challenges AI presents, such as societal policy issues – displacement, bias and privacy.

Exploration of the ethical and societal dimensions of AI will be the featured theme at an AI conference at New York University’s Center on Civil Justice. NYU and The Future Society are convening the two-day summit bringing together legislators, judges, lawyers, corporate counsel, NGOs, academics, and other experts, to examine these issues. The summit will be an opportunity to identify frameworks that could support a set of actionable ethical principles, policy frameworks, new codes of conduct, and regulations, to help society benefit from technological advancements while mitigating risks associated with AI. Registration for the event is available here.