A perspective on Administration Activities in Artificial Intelligence

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Artificial Intelligence: an Administration Perspective

"We're on the verge of new technological revolutions that could improve virtually every aspect of our lives, create vast new wealth for American workers and families, and open up bold, new frontiers in science, medicine, and communication."
- President Donald J. Trump

"Artificial intelligence holds tremendous potential as a tool to empower the American worker, drive growth in American industry, and improve the lives of the American people. Our free market approach to scientific discovery harnesses the combined strengths of government, industry, and academia, and uniquely positions us to leverage this technology for the betterment of our great nation."
- Michael Kratsios, Deputy Assistant to the President for Technology Policy

Artificial Intelligence: an Administration Priority

FY 2019 R&D Budget Priorities memo
"autonomous systems, ... machine learning, and quantum computing ..... coordinated interagency initiatives, ... STEM education, including computer science education "
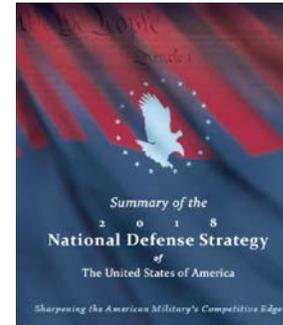
National Security Strategy
"prioritize emerging technologies critical to economic growth and security, such as data science, encryption, autonomous technologies,... advanced computing technologies, and artificial intelligence. "

National Defense Strategy
".. invest broadly in military application of autonomy, artificial intelligence, and machine learning, including rapid application of commercial breakthroughs."

"AI holds the potential to transform the lives of Americans."

FY19 President's Budget, Analytical Perspectives

Artificial Intelligence for the American People

- **Prioritizing funding for AI R&D** including computing infrastructure, machine learning and autonomous systems.

- **Removing Barriers to AI Innovation:** removing regulatory barriers to deployment of AI-powered technologies.

- **Training the future American workforce**: Executive action to give American workers skills to succeed in 21st century economy.

- **Achieving strategic military advantage:** recognizing need to lead in AI, with DoD investing accordingly.

- **Leveraging AI for government services:** applying AI to improve the provision of government services.

- **Leading international AI negotiations:** OSTP led U.S. delegations to 2017 & 2018 G7 Innovation and Technology Ministerials, working with our allies to recognize potential benefits of AI, promote AI R&D.

2018 White House Summit on AI for American Industry

- May 10, 2018
- 100+ participants: senior government officials, top AI academics, heads of industrial research labs, American business leaders
- two sets of breakout sessions:
  - *cross-cutting issues:* AI R&D, workforce development, regulatory barriers to AI innovation
  - sector-specific applications: food and agriculture, energy and manufacturing, financial services, healthcare, and transportation and logistics

2018 White House Summit on AI for American Industry

Key takeaways:

- Supporting the national AI R&D ecosystem, including stronger public-private partnerships to accelerate AI R&D

- Developing the American workforce to take full advantage of the benefits of AI.

- Removing barriers to AI innovation in the United States.

- Enabling high-impact, sector-specific applications of AI

Establishment of a Select Committee on AI

- advise White House on interagency AI R&D priorities;

- consider creation of Federal partnerships with industry and academia;

- establish structures to improve government planning and coordination of AI R&D; and

- identify opportunities to leverage Federal data and computational resources to support our national AI R&D ecosystem

Membership: the most senior R&D officials of the Federal Government, including:

- Undersecretary of Commerce for Standards and Technology
- Undersecretary of Defense for Research and Engineering
- Undersecretary of Energy for Science
- Director, NSF (co-chair)
- Director, DARPA (co-chair)
- Direct IARPA
- Representatives from National Security Council, Office of the Federal CIO, OMB, Office of Science and Technology Policy (co-chair)

G7 Innovation Ministers' Statement on Artificial Intelligence

"Artificial intelligence ("AI") represents a set of complex and powerful technologies that will touch or transform every sector and every industry and will help society address some of our most challenging problems.

…Innovations in AI technologies have the potential to introduce new sources of economic growth especially in countries struggling with an aging population or economies highly dependent on traditional levers of production, including by helping overcome hurdles to full participation in the workforce and in our societies."

G7 Innovation Ministers' Statement on Artificial Intelligence

- **Supporting economic growth from AI innovation** is about using AI applications to help improve economic performance.

- **Increasing trust in and adoption of AI** are necessary ingredients for economic growth and the fuel for future innovations.

- **Promoting inclusivity in AI development and deployment** is critical to ensuring broad public support for AI adoption and ensuring all members of society can benefit from this technology.

- G7 members will endeavor to:

    - invest in basic and early-stage applied R&D to produce AI innovations, and support entrepreneurship in AI and labour force readiness

    - continue to encourage research, including solving societal challenges, advancing economic growth, and examining ethical considerations of AI

    - support public awareness efforts to communicate actual and potential benefits, and broader implications, of AI

    - …