Preparing for the Future of Artificial Intelligence

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Summary:

Today, we're announcing a new series of workshops and an interagency working group to learn more about the benefits and risks of artificial intelligence.

There is a lot of excitement about artificial intelligence (AI) and how to create computers capable of intelligent behavior. After years of steady but slow progress on making computers "smarter" at everyday tasks, a series of breakthroughs in the research community and industry have recently spurred momentum and investment in the development of this field.

Today's AI is confined to narrow, specific tasks, and isn't anything like the general, adaptable intelligence that humans exhibit. Despite this, AI's influence on the world is growing. The rate of progress we have seen will have broad implications for fields ranging from healthcare to image- and voice-recognition. In healthcare, the President's <u>Precision Medicine Initiative</u> and the <u>Cancer Moonshot</u> will rely on AI to find patterns in medical data and, ultimately, to help doctors diagnose diseases and suggest treatments to improve patient care and health outcomes.

In education, AI has the potential to help teachers customize instruction for each student's needs. And, of course, AI plays a key role in self-driving vehicles, which have the potential to save thousands of lives, as well as in unmanned aircraft systems, which may transform global transportation, logistics systems, and countless industries over the coming decades.

Like any transformative technology, however, artificial intelligence carries some risk and presents complex policy challenges along several dimensions, from jobs and the economy to safety and regulatory questions. For example, Al will create new jobs while phasing out some old ones—magnifying the importance of programs like TechHire that are preparing our workforce with the skills to get ahead in today's economy, and tomorrow's. Al systems can also behave in surprising ways, and we're increasingly relying on Al to advise decisions and operate physical and virtual machinery—adding to the challenge of predicting and controlling how complex technologies will behave.

There are tremendous opportunities and an array of considerations across the Federal Government in privacy, security, regulation, law, and research and development to be taken into account when effectively integrating this technology into both government and private-sector activities.

That is why the White House Office of Science and Technology Policy is excited to announce that we will be co-hosting four public workshops over the coming months on topics in AI to spur public dialogue on artificial intelligence and machine learning and identify challenges and opportunities related to this emerging technology. These four workshops will be co-hosted by

academic and non-profit organizations, and two of them will also be co-hosted by the National Economic Council. These workshops will feed into the development of a public report later this year. We invite anyone interested to learn more about this emergent field of technology and give input about future directions and areas of challenge and opportunity. You can learn more about these events via the links to the event websites below, and each workshop will be livestreamed:

- May 24, 2016: <u>Legal and Governance Implications of Artificial Intelligence</u> in Seattle, WA
- June 7, 2016: <u>Artificial Intelligence for Social Good</u> in Washington, DC
- June 28, 2016: Safety and Control for Artificial Intelligence in Pittsburgh, PA
- July 7: The Social and Economic Implications of Artificial Intelligence Technologies in the Near-Term in New York City

The Federal Government also is working to leverage AI for public good and toward a more effective government. A new National Science and Technology Council (NSTC) Subcommittee on Machine Learning and Artificial Intelligence will meet for the first time next week. This group will monitor state-of-the-art advances and technology milestones in artificial intelligence and machine learning within the Federal Government, in the private sector, and internationally; and help coordinate Federal activity in this space.

Broadly, between now and the end of the Administration, the NSTC group will work to increase the use of AI and machine learning to improve the delivery of government services. Such efforts may include empowering Federal departments and agencies to run pilot projects evaluating new AI-driven approaches and government investment in research on how to use AI to make government services more effective. Applications in AI to areas of government that are not traditionally technology-focused are especially significant; there is tremendous potential in AI-driven improvements to programs and delivery of services that help make everyday life better for Americans in areas related to urban systems and smart cities, mental and physical health, social welfare, criminal justice, the environment, and much more.

We look forward to engaging with the public about how best to harness the opportunities brought by artificial intelligence. Stay tuned for more information about the work we're doing on this subject as it develops over the coming months.

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