



July 12, 2019

MIT and U.S. Air Force Sign Agreement to Launch AI Accelerator

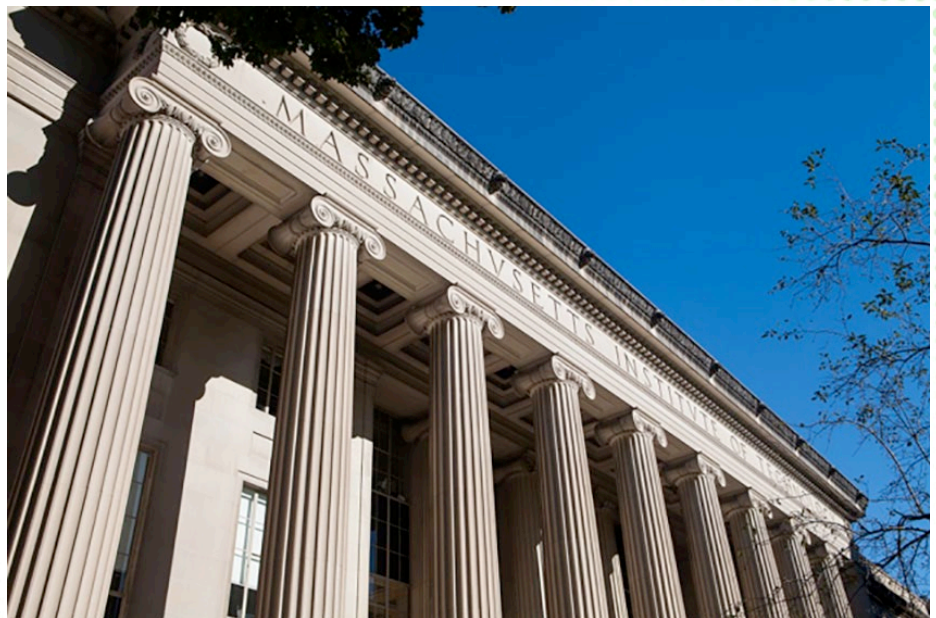
Community

MIT and the U.S. Air Force have signed an agreement to launch a new program designed to make fundamental advances in artificial intelligence that could improve Air Force operations while also addressing broader societal needs.

The effort, known as the MIT-Air Force AI Accelerator, will leverage the expertise and resources of MIT and the Air Force to conduct fundamental research directed at enabling rapid prototyping, scaling, and application of AI algorithms and systems. The Air Force plans to invest approximately \$15 million per year as it builds upon its five-decade relationship with MIT.

The Beaver Works facility will house the program and the Laboratory will make available its specialized facilities and resources. Bob Bond, Chief Technology Officer, Technology Office, and Dr. Jeremy Kepner, Laboratory Fellow, Supercomputing Center, will oversee the Laboratory's involvement.

"Laboratory researchers will be key contributors to all aspects of the AI Accelerator. This includes performing groundbreaking AI research, developing new AI challenges to engage the entire AI ecosystem, and transitioning AI innovations into Air Force missions," said Kepner.



The new program will focus on rapid deployment of artificial intelligence innovations in operations, disaster response, and medical readiness. (Photo credit: Jake Belcher)

The program is expected to support at least 10 MIT research projects addressing challenges that are important to both the Air Force and society more broadly, such as disaster response and medical readiness.

"This collaboration is very much in line with MIT's core value of service to the nation," said Maria Zuber, MIT's vice president for research and the E.A. Griswold Professor of

Geophysics. "MIT researchers who choose to participate will bring state-of-the-art expertise in AI to advance Air Force mission areas and help train Air Force personnel in applications of AI."

Under the agreement, MIT will form interdisciplinary teams of researchers, faculty, and students whose work focuses on topics in artificial intelligence, control theory, formal methods, machine



MIT and U.S. Air Force Sign Agreement to Launch AI Accelerator (continued)

learning, robotics, and perception, among other fields. Teams will also include leaders in technology policy, history, and ethics from a range of departments, labs, and centers across the Institute. Members of the Air Force will join and lend expertise to each team.

“MIT is the leading institution for AI research, education, and application, making this a huge opportunity for the Air Force as we deepen and expand our scientific and technical enterprise,” said Heather Wilson, former Secretary of the Air Force. “Drawing from one of the best of American research universities is vital.”

The program will aim to develop new algorithms and systems to assist complex decision-making that might help the Air Force, for example, better focus its maintenance efforts—an expensive and critical part of its aircraft operations. This fundamental research also intends to develop AI to assist humans in aspects of planning,

control, and other complex tasks. Finally, the work aims to enable rapid deployment of advanced algorithms and capabilities developed at MIT to foster AI innovation across the country.

In addition to disaster relief and medical readiness, other possible research areas may include data

“MIT researchers who choose to participate will bring state-of-the-art expertise in AI to advance Air Force mission areas and help train Air Force personnel in applications of AI.”

management, maintenance and logistics, vehicle safety, and cyber resiliency.

This article first appeared on the MIT News Office website, originally authored by Rob Matheson, and had been adapted for The Bulletin.

