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How CMU is preparing for the battleground of the future

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While the nature of war may never change, the U.S. Army's Future Command General Mike Murray said the character of war fundamentally will, and that change is already being seen through the implementation of technology like artificial intelligence.

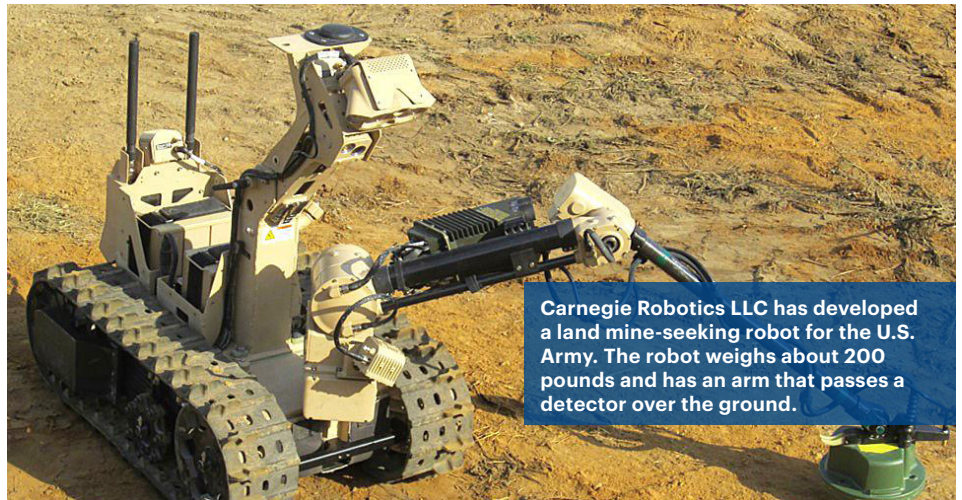
Today the U.S. Army officially activated its new Artificial Intelligence Task Force in partnership with Carnegie Mellon University during a ceremony at CMU's National Robotics Engineering Center in Lawrenceville.

"Why did the Army do this?" said Murray. "It was one single purpose. To make our soldiers and our units of the future more effective, and... to ensure they have the concepts and capabilities and organizational designs they need to fight and win on a future battlefield. Or better yet, they will never have to fight."

Murray said the best validation for the work to come out of this task force would be to never have to use the tools they build.

The AI task force's initial priorities include applying AI tech to equipment maintenance and logistics, situational awareness, and humanitarian assistance and disaster relief.

CMU President Farnam Jahanian said CMU has been collaborating with the U.S. Department of Defense for over 70 years and proven that breakthroughs in science and technology are greatly accelerated by engagement with real problems. Jahanian said CMU recognizes the importance of a partnership with the U.S. Army as work where human lives are at stake.



"This effort is about creating and leveraging autonomous tools that take [soldiers] out of harm's way," said Jahanian. "It's about algorithms that can save billions of dollars in maintenance costs and make sure critical equipment and logistical resources are ready when our soldiers need them."

Other uses could include better training and medical care, autonomous ground vehicles, unmanned aircraft, sensors that rapidly process information and images, and innovations to assist the soldiers who buy, store and move DOD supplies.

For example, Secretary of the Army Mark Esper said that during the Iraq War, soldiers died during routine logistics runs. With AI advancements and implementation, Esper said the Army can put fewer soldiers in autonomous vehicle convoys and save many lives.

While CMU will serve as the host site for the AI Task Force headquarters, the partnership will eventually include other leading universities and private sector engagement. Jahanian said the U.S. Army

will provide funding to these partners for research, but did not disclose the amount CMU would get.

Jahanian said CMU has an obligation to use its talents and knowledge to strengthen national defense and national security, but the opening of the task force partnership will also open a dialogue at the university around the ethics behind each technology developed.

Murray and Esper added that while the U.S. Army is working to modernize, it can never really know exactly what to expect from a battleground of the future. As the imaginations of many audience members present jumped to fully-autonomous weapons systems and fighting completed by robots, they said many more ethical discussions are to be had before those types of plans make the to-do list of the task force.

The task force will be overseen by the Army Futures Command, established in July 2018. It marks the first major reorganization of the U.S. Army since Forces Command and Training and Doctrine Command were established in 1973.