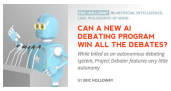
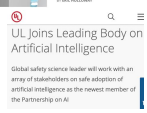
economicthinking
Understanding and Creating Prosperity



USFG/NATO Artificial Intelligence, Cybersecurity, and Biotechnology, Innovation and Security



Resolved: The United States federal government should substantially increase its security cooperation with the North Atlantic Treaty Organization in one or more of the following areas: artificial intelligence, biotechnology, cybersecurity.

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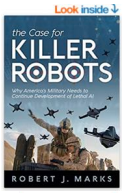
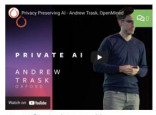
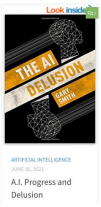


Regulate or Certify Emerging A.I. Technologies?



Artificial Intelligence, Public Trust, and Public Health



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- *However, NATO and the transatlantic allies are neither the only nor the most agile actors investing in emerging and disruptive technologies. China and Russia…invest substantially [and accelerated] adoption of these technologies in military applications.*
- *To maintain its strategic advantage against China and Russia, NATO needs to become an agent of innovation and be more agile and strategic in supporting allies to jointly exploit new technologies for deterrence, defense, and resilience purposes.*
- *NATO has prioritized EDTs and signaled it has joined "the technological adoption race" against China and Russia. I*
- *Much work remains to be done. Allies remain divided on the ethical and legal specifics of the military use of EDTs and by their national-industrial preferences.*

Better Technology

Faster, Smaller, Safer, Smarter

- *Economics is about tradeoffs…*
- Tools leverage labor and increase human productivity.
- As improved tools—smarter software and machines—raise productivity, wages increase.
- A.I. tech. allows fewer people to produce more across the economy.
- *Farming, mining, manufacturing,* ***military***, ***defense***, *education, programming, medical, elder care…*

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Technology Trade Offs

Faster, Smaller, Safer, Smarter

- Smarter technologies: smartphones, smart cars, smart vacuum cleaners…
- A.I. robots programmed to learn and adapt.
- Smarter tanks, ships, robots for: warfare…
- Trade offs: tasks/jobs/mistakes by A.I. tech replace risky tasks/jobs/mistakes by people.
- But w/ military A.I. will putting robots rather than soldiers as risk promote use?
- Purely defensive A.I. military technologies?

Certified Safe A.I.: UL Approved

USFG reform/regulation vs. NGO certification

- Regulate or Certify A.I. products and services as safe (and fair)?
- Separate from for-profit companies are Non-Government Organizations (NGOs): clubs, charities, churches, universities, foundations, and associations
- Plus technology standards groups for tech industry.
- *What Does It Mean to Certify an AI Product as Safe?*, (Dataversity, July 16, 2018), James Kobielus says fear about A.I. technologies is similar to past fears of electricity when first developed and introduced

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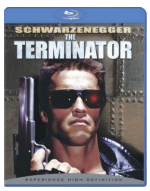
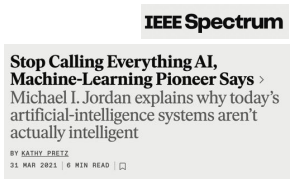
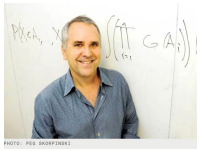


A.I. or Machine Learning?

- *Artificial-intelligence systems are nowhere near advanced enough to replace humans in many tasks involving reasoning, real-world knowledge, and social interaction.*
- *They are showing human-level competence in low-level pattern recognition skills,*
- *but at the cognitive level they are merely imitating human intelligence, not engaging deeply and creatively, says Michael I. Jordan, a leading researcher in AI and machine learning.*





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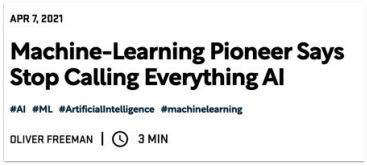
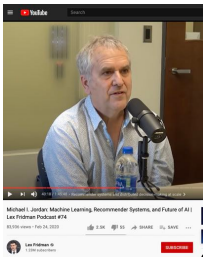


aimagazine.com/machine-learning/machine-learning-pioneer-says-stop-calling-everything-ai



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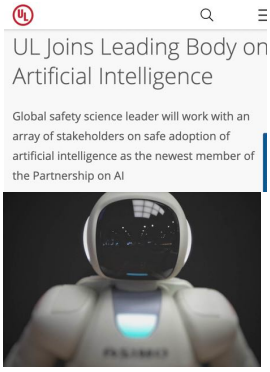

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