



Toward a Ban on Lethal Autonomous Weapons: Surmounting the Obstacles

Should robots be allowed to kill?

Many kinds of weapons have been banned by international agreements and treaties – such as the UN Convention on Certain Conventional Weapons (CCW), which restricts the use of landmines, incendiary weapons, and lasers in warfare. There are efforts underway to regulate “autonomous weapons” as well, where “autonomous” means weapons that operate without meaningful human control.

We are already worried about the potential risks of robot automobiles. Advances in artificial intelligence and low-cost drone technology will soon make it possible to build weapons that can make decisions about which targets to attack – without direct human input. What kinds of rules should the international community establish for deploying such weapons? The rules we need are not clearcut.

How can we control autonomous weapons that might be used to make lethal attacks on civilian populations? Are some kinds of autonomous weapons (such as autonomous anti-missile defense systems) morally “good”? Design and testing is an important issue, because unreliable weapons could cause unintended harm to people and property. What kinds of rules should be followed in the design and testing of autonomous weapons?

For more information, see the May 2017 article from *Communications of the ACM*:

<https://cacm.acm.org/magazines/2017/5/216318-toward-a-ban-on-lethal-autonomous-weapons/fulltext>

Here are some other useful links on this topic:

<https://www.pri.org/stories/2016-06-18/case-un-ban-killer-robots>

<https://www.theguardian.com/technology/2017/aug/20/elon-musk-killer-robots-experts-outright-ban-lethal-autonomous-weapons-war>

<https://www.wired.com/story/sorry-banning-killer-robots-just-isnt-practical/>

Wendell Wallach is senior advisor to The Hastings Center. He is also a scholar, consultant, and author at Yale University’s Interdisciplinary Center for Bioethics, where he has chaired Technology and Ethics studies for the past eleven years. His latest book, a primer on emerging technologies, is entitled, *A Dangerous Master: How to keep technology from slipping beyond our control*. In addition, he co-authored (with Colin Allen) *Moral Machines: Teaching Robots Right From Wrong*. He received the World Technology Award for Ethics in 2014 and for Journalism and Media in 2015, as well as a Fulbright Research Chair at the University of Ottawa in 2015-2016. The World Economic Forum appointed Mr. Wallach co-chair of its Global Future Council on Technology, Values, and Policy for the 2016-2018 term.

Date:	Thursday, November 16, 2017, 8:00 pm. (Refreshments and networking at 7:30 pm.)
Place:	Small Auditorium, Room CS 105 Computer Science Building, Princeton University
Information:	Dennis Mancl (908) 285-1066
On-line info:	http://PrincetonACM.acm.org

All Princeton ACM / IEEE-CS meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner is held at 6:00 p.m. at Ruby Tuesday’s Restaurant on Route 1. Please send email to princetonacm@acm.org in advance if you plan to attend the dinner.

