

Australian AI expert Toby Walsh takes fight to ban 'killer robots' to United Nations after thousands sign petition

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Photo: The age of autonomous killing machines is closer than you think.

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An Australian expert in artificial intelligence has laid out the case to ban killer robots, warning they could be the "third revolution of warfare" and spark a new arms race.

Toby Walsh, from the University of New South Wales, was asked to address the United Nations in New York after thousands of experts signed his petition calling for a ban on autonomous killing machines.

When you think of killer robots the Terminator films immediately come to mind, but while we cannot send cyborgs back through time, the age of autonomous killing machines is closer than you think.

Giving machines the decision to make life-or-death choices in war is what Professor Walsh would like to see banned.

"Some people said this was actually going to be the third revolution of warfare, the first revolution being gun powder - the invention of gun powder completely transformed how we fought wars," Professor Walsh said.

"The second revolution was the invention of nuclear bombs, and this will be the third revolution. It will completely change the efficiency with which warfare is fought."

There are rules of warfare, you have to distinguish between combatants and civilian, and this weapon system cannot make that sort of distinction.

Toby Walsh, the University of New South Wales

Professor Walsh said there was no way the robot could make a distinction between enemy or ally.

"That's one of the arguments against these as a weapons system, is that they can't actually apply the international rules of war," he said.

"There are rules of warfare, you have to distinguish between combatants and civilian, and this weapon system cannot make that sort of distinction."

Professor Walsh was invited to a side event in New York as part of a United Nations committee meeting on security and disarmament to lay out his arguments on why they should be banned.

It came after his petition calling for a ban was signed by more than 20,000 people, including thousands of experts and researchers thrusting the issue into the spotlight.

"If you think of the drones that are flying above Afghanistan today, well those are still controlled by a human, there's still a US soldier in a container in Nevada who is actually remotely controlling those drones," he said.

YouTube: South Korea Intelligent Surveillance and Guard Robot

"But it would take very little to take that soldier out of the loop and have a computer make that final life or death decision, to fire the hellfire missile, and as I said, the UK Ministry of Defence say that's pretty much technically feasible today."

Professor Walsh said there are already some autonomous killer robots in existence.

"One that comes to mind is the Samsung sentry robot, that is actually in use in the demilitarisation zone between North and South Korea," he said.

"This is brought to you by the nice people who make your smart phones.

"It will shoot you with deadly accuracy from four kilometres away, in fact anyone who steps into the demilitarised zone will be shot dead."

KILLER ROBOTS COULD BE BUILT AT HOME WITH EVERYDAY OBJECTS

He said if the technology was allowed to be developed, it would be very hard to stop.

"There's going to be an arms race if we allow this technology to be developed and we're likely to be on the receiving end," he said.

"You've got to remember that every time you introduce the technology into the battlefield, it will be very quickly used against you, and it's going to be very quickly used against us by people like terrorists and rogue nations who will have no moral qualms about turning them on our civilian populations."

Getting countries to agree to a ban on autonomous killing machines will be a huge task as governments would much prefer to send robots into dangerous zones over human troops.

And there is always the problem of technology evolving to such a point where anyone could build simple offensive systems from everyday objects.

"The technology is certainly inevitable," Professor Walsh said.

"It's pretty much the same technology from an autonomous weapon system as is going to go into your autonomous car; if you buy a high end car today it actually has got much of that already in it.

"And we're going to want that. High end autonomous cars are going to save thousands or so of people who die on the roads of Australia every year.

"Autonomous cars will be far safer, there will be almost no accidents with autonomous cars.

"So we're going to want the technology, we're not going to un-invent the technology, it's going to have many... peaceful and useful purposes, but what you can do is you can associate a stigma with the weapons system, so that arms companies do not develop it, arms companies do not sell it."

<http://www.abc.net.au/news/2015-10-20/australian-ai-expert-calls-for-ban-on-killer-robots-at-un/6868834>

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