

HOW TO DO A SCIENTIST LETTER

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The scientific community is an important voice in the killer robots debate. These are the people that understand the technology and the implications of using it for targeting in autonomous weapons.

Over the years it has become clear that there is a lot of concern in the scientific community regarding autonomous weapons, also known as fully autonomous weapons. We have seen this in the recent successful protests by tech-workers at Google for the company's involvement in the Pentagon's Project Maven, but also in various open-letters by scientists.¹ In 2015 more than 3,000 robotics and Artificial Intelligence experts, including prominent scientists such as Stephen Hawking, Barbara Grosz (Harvard) and Demis Hassabis (Google), called for a ban.² In 2017, 116 AI and robotics companies urged United Nations to ban lethal autonomous weapons (including Google Deepmind).³ In 2018 more than 160 AI-related companies and 2,400 individuals pledged to not develop lethal autonomous weapons.⁴ Besides these international letters there have been national letters in [Australia](#) and [Canada](#) and [Belgium](#).

We have found national scientist letters a useful way:

- to demonstrate concern about autonomous weapons and support for a ban from the scientific community.
- to influence decision makers to take steps towards banning autonomous weapons.
- to create media attention and engage the general public on the issue.

Here are the steps to develop a scientist letter in your country.

1. Find a good moment for the letter
2. Develop the text of the letter
3. Make a google form for people to sign the letter
4. Identify and contact gatekeepers in the scientific community
5. Open the letter for signatures, listing as many of the "first wave" signers as possible
6. Launching the letter

1. FIND A GOOD MOMENT FOR YOUR LETTER

A scientist letter works best if you can link it to the local context. Is there something happening in parliament (debate, resolution) or is the government developing or procuring new weapon systems with autonomy? It can be good to then launch the letter a few days before this event to demonstrate to policy makers that there are concerns from the AI community and they support the call for a ban, or other intermediate goal(s). For example in Belgium we launched the letter a few days before a hearing in the Belgian Federal parliament. This created a lot of media attention and made politicians realize it was an issue they needed to take action on. Also check if there are no other big events happening that might compete for media or political attention.

"A scientist letter works best if you can link it to the local context."

2. DEVELOP THE TEXT OF THE LETTER

Below we have added the text of the Belgian scientist letter. You can use this template or develop your own text. There are a few things to keep in mind:

- It is important that the letter includes a basic definition of what a killer robot (fully autonomous weapon) is. In this way the call links to the international debate and the language used by the Campaign to Stop Killer Robots. Killer robots are *“fully autonomous weapon systems which lack meaningful human control over the critical functions of targeting and engagement in every attack.”*
- The letter should specify exactly what your ask is. For example: *“We therefore call upon the <Country> government and parliament to join international efforts to preventively prohibit such weapon systems, and to resolve as a nation never to develop, acquire or deploy such weapon systems.”*

“The letter should specify exactly what your ask is.”

- Decide what language to use. English may be a good choice as there may be foreign scientists working in your country. However, using English in certain parliaments might not be received as well. This should be kept in mind. A version in English and a version in your national language could be a good compromise.
- It is good to refer to the other scientist letters. If scientists see it is part of an international movement of scientists they are more likely to support the letter.
- It is good to also mention the positive applications of AI. As these people are working on AI they will not like a letter that is only negative about their field of work.
- It can be good to identify 2-5 key scientists to invite to discuss/edit the draft letter.

Here is an example of the text of the Belgian scientist letter:

Autonomous weapons: an open letter from Belgian scientists

As members of the Belgian artificial intelligence (AI) and robotics research community, we wish to thank the Belgian government and parliament for its interest in the broad field of AI and robotics.

As you know, AI and robotics research have made spectacular advances during the last decade. Soon we will see self-driving cars, autonomous aircraft and many useful applications of these technologies. These technologies can greatly contribute to our society as a whole. As with all technological developments, AI and robotics can have positive and negative applications. Therefore these transformations actual and potential demand our understanding and, increasingly, our heightened moral attention.

As Belgian scientists and researchers in robotics and artificial intelligence, we express our deep concern about the development of fully autonomous weapon systems which lack meaningful human control over the critical functions of targeting and engagement in every attack.

We join similar efforts by international colleagues and CEOs in August 2017 and July 2015, and by researchers in Australia and Canada in November 2017. Fully autonomous weapon systems threaten to become a third revolution in warfare. The development and use of such systems pose serious threats to international law, as well as to human rights and human dignity. Once developed, these weapon systems will lower the threshold to become involved in armed conflict, while allowing armed conflict to be fought at a scale greater than ever.

The development of these systems will likely cause expensive arms races and lead to regional and global insecurity. Autonomous weapons are likely to proliferate rapidly, and could initiate or escalate conflicts without human deliberation. Moreover, the development of such weapon systems raises significant accountability questions, as it is unclear who could be held accountable for any misbehaviour of such weapon systems.

Urgent action to address these concerns and prevent proliferation is needed. Once this Pandora’s box is opened, it will be very hard to close. We therefore call upon the Belgian government and parliament to join international efforts to preventively prohibit such weapon systems, and to resolve as a nation never to develop, acquire or deploy such weapon systems.

3. MAKE A FORM FOR PEOPLE TO SIGN THE LETTER

There are various online forms you can use. Google has a template that you can develop your own form in that people can sign. You can find a tutorial here: <http://bit.ly/formhelpcskr>

The webform can consist of three parts:

- The text of the letter (see above).
- The top ten of most prominent signees to demonstrate support of the letter. If people see that other prominent scientists have signed they will be more likely to also support it.
- The form signees can fill in their personal information.

Text for form:

“I affirm the above, and would like to add my signature to this open letter.”

You can use the following fields:

- Title
- Name (first and surname)
- University
- It is good to add an option to choose between which areas of science people come from, so you can see who are involved in different fields. For example, 1) computer science, 2) artificial intelligence, 3) robotics, 4) other disciplines.
- Email address

It is important to do title first and then the name as this makes it easier when exporting the information (we learned that the hard way).

4. IDENTIFY AND CONTACT GATEKEEPERS IN THE SCIENTIFIC COMMUNITY

It is good to generate and identify a list of gatekeepers meaning people who are well connected and well known in the scientific community. Such gatekeepers can be your inroad into the scientific community. These can be people you know, but it can also be good to approach a number of prominent AI and Robotics researchers for the “first wave” of invitations to sign. Once you have these on board other scientists are more likely to sign the letter if they know their (prominent) colleagues have signed.

5. OPEN THE LETTER FOR SIGNATURES, LISTING AS MANY OF THE “FIRST WAVE” SIGNERS AS POSSIBLE

Once you have the online form to sign and a number of first signers you can start spreading the letter within the wider scientific community. It can be good if the letter is spread and promoted by scientists. One reason is that scientist value their academic independence and don’t always want to be associated with activists or advocacy groups. This can be done by working together with scientists in your country. Another option is to contact the Campaign to Stop Killer Robots or ICRAC who have a network of international scientists that probably have contact with scientists in your country.

It is good to keep in mind to:

- Set a date until when the letter is open for signatures.
- Make a template email to send to scientists. We have included an example below:

Dear ... ,

As you might have heard our colleagues in [Australia](#) and [Canada](#) have signed letters calling for preventing the development and use of fully autonomous weapons (weapon systems using computational techniques to select and attack targets without any meaningful human control). These two letters follow an [international letter](#) calling for a ban in 2015 signed by over 2,000 AI and robotics researchers, and a [more recent international letter](#) signed by 116 AI and robotics company CEOs and CTOs calling on the UN to protect us from the dangers of fully autonomous weapons.

Meanwhile, a [resolution](#) was put forward in the Belgian parliament which will consider Belgium’s policy on this issue, which will be discussed at a parliamentary hearing on the 6th of December, 2017.

With this in mind we felt the need to start a similar open-letter initiative in Belgium. In the link below you can find the text of the open-letter we want to publish, in which we call upon the Belgian government and parliament to join international efforts to preventively prohibit such weapon systems, and to resolve as a nation never to develop, acquire or deploy such weapon systems.

As an eminent Belgian researcher, we would very much appreciate your support and signature on this open letter.

We aim to publish the letter on Monday the 4th December, ahead of the parliamentary discussion. Therefore we ask you to sign on to the letter before the 1st of December if you support the call. We also ask that you please forward this to your Belgian colleagues in AI and robotics, and encourage their support.

If you are willing to sign the open letter, you can add your name on this form: <https://bit.ly/2CEPmbd>

Thank you for your time and consideration.

Sincerely,

6. FINALISING THE LETTER FOR PUBLICATION

Contact the signees to thank them for their support and check if they have really signed it, and ask them to share it with their colleagues.

- Make any adjustment to names, titles etc. based on the feedback from signees.
- Make a page with the text of the letter and the list of signees. This is the link you can share with the media and others. For example: <http://bit.ly/BelgianCSKRletter>
- If you did decide to write the letter in English only, perhaps think to translate it into the national language in order to share the information nationally.

Dear Supporter,

Thank you for signing the open letter to the Belgian Parliament on autonomous weapons. The letter will be launched this week to coincide with the hearing in parliament on Wednesday the 6th of December. We now have 88 scientists from the artificial intelligence, robotics and computer science community. You can find your name in the list of signees in the attached MS Word doc. Please check if we have added your name and title correctly.

If you have any corrections in your name/title please let us know before Wednesday 6 December 8.00 a.m. Thank you once again for supporting this initiative.

We would greatly appreciate if you could share this letter with of your colleagues who might be willing to sign it. The form to sign can be found here: <https://bit.ly/2CEPmbd>

Sincerely,

7. LAUNCHING THE LETTER

As mentioned it is good to connect the launch of the letter to a political moment, like a debate in parliament. Launching the letter beforehand creates attention to the issue and makes politicians aware of the public interest on the issue and pressures them to take action.

Press release: Write a press release that mentions the political moment you are trying to influence, and describes what killer robots are and what the concerns are. Has there been an [IPSOS poll](#) done in your country? It can be good to add these figure to demonstrate public support for a ban.

Under embargo: It is good to share the press release with the media before the launch date, but ensure it is clear that when the letter will be launched and that it is under embargo until then.

Spokesperson(s): Decide who is/are going to be the spokesperson(s). As mentioned earlier it can be good if this is one of the scientists who signed the letter. Make sure this person is

properly briefed; that she/he knows the details of the issue and shares the same position as you. If necessary share a factsheet with some basic information or talking points on it.

Op-eds: It can be useful to place an op-ed in national paper(s) with the scientist letter or at least the call by scientists for the government to take action on the issue. If possible it can be good if this letter is published under the names of a number of prominent signees. It can also be a letter by one of the most prominent signees, a group of signees, but also by prominent international scientists.

Public event: It can be good to organise a public event surrounding the launch of the letter where a number of scientists and/or civil society speakers discuss the issue.

Policy makers: Also send a copy of the letter to the policy makers you are trying to influence.

If you have any questions regarding setting up a scientist letter in your country don't hesitate to contact: kayser@paxforpeace.nl

ENDNOTES

- 1 Google Plans Not to Renew Its Contract for Project Maven, a Controversial Pentagon Drone AI Imaging Program (June 2018) <https://gizmodo.com/google-plans-not-to-renew-its-contract-for-project-mave-1826488620>
- 2 Autonomous weapons: an open letter from AI & robotics researchers, (July 2015), <http://futureoflife.org/open-letter-autonomous-weapons>
- 3 Killer robots: World's top AI and robotics companies urge United Nations to ban lethal autonomous weapons (August 2018), <https://futureoflife.org/2017/08/20/killer-robots-worlds-top-ai-robotics-companies-urge-united-nations-ban-lethal-autonomous-weapons>
- 4 AI Companies, Researchers, Engineers, Scientists, Entrepreneurs, and Others Sign Pledge Promising Not to Develop Lethal Autonomous Weapons (July 2018), <https://futureoflife.org/2018/07/18/ai-companies-researchers-engineers-scientists-entrepreneurs-and-others-sign-pledge-promising-not-to-develop-lethal-autonomous-weapons>

Under embargo until DATE 01.00h a.m.

Press release - <country> scientists call to ban “killer robots”

Date

On the eve of a parliamentary hearing, XX <country> scientists, including XX scientists in robotics and artificial intelligence (AI), call on the Belgian government to impose a national ban on “killer robots”. The scientists want <country> to join the growing international movement that want to ban killer robots.

Machines that kill people

Killer robots are weapon systems that can select and attack targets without meaningful human control. In an open letter, XX scientists in robotics and artificial intelligence express great concern about these weapon systems. They argue that the development of such weapons systems poses a serious threat to international law, human rights and human dignity. Killer robots can also lower the threshold for warfare, while armed conflict can take place on a larger scale than ever before.

The <country> scientists also warn against an arms race and escalation of conflicts. Killer robots also raise questions about who is responsible if something goes wrong. For these reasons, the scientists argue that the federal government and parliament should impose a national ban and join the growing international movement that wants to ban killer robots.

International initiatives

The appeal from scientists follows similar recent initiatives in Belgium, Canada and Australia where scientists also called for a ban on fully autonomous weapons. In July 2015, more than 3,000 scientists also called for a ban, while in August 2017, 116 CEOs from robotics and AI companies opposed killer robots.

International ban

The subject is also high on the agenda at the United Nations. At least XX countries want to start negotiations on a preventive ban on killer robots. <Country> must join this group of countries and play a leading role in the international debate.

We are on the edge of a new era: the complete automation of warfare and the outsourcing of decisions about life and death to computer programs. It is therefore essential not to create facts that we cannot reverse afterwards. Killer robots must be banned before it is too late.

The entire text of the open letter:

.....

For more information you can contact: XX

The full list of signatories can be found here. Well-known signatories include:

Ten biggest names