

An Open Letter to the United Nations Convention on Certain Conventional Weapons

As companies building the technologies in Artificial Intelligence and Robotics that may be repurposed to develop autonomous weapons, we feel especially responsible in raising this alarm.

We warmly welcome the decision of the UN's Conference of the Convention on Certain Conventional Weapons (CCW) to establish a Group of Governmental Experts (GGE) on Lethal Autonomous Weapon Systems. Many of our researchers and engineers are eager to offer technical advice to your deliberations.

We commend the appointment of Ambassador Amandeep Singh Gill of India as chair of the GGE. We entreat the High Contracting Parties participating in the GGE to work hard at finding means to prevent an arms race in these weapons, to protect civilians from their misuse, and to avoid the destabilizing effects of these technologies.

We regret that the GGE's first meeting, which was due to start today, has been cancelled due to a small number of states failing to pay their financial contributions to the UN. We urge the High Contracting Parties therefore to double their efforts at the first meeting of the GGE now planned for November.

Lethal autonomous weapons threaten to become the third revolution in warfare. Once developed, they will permit armed conflict to be fought at a scale greater than ever, and at timescales faster than humans can comprehend. These can be weapons of terror, weapons that despots and terrorists use against innocent populations, and weapons hacked to behave in undesirable ways. We do not have long to act. Once this Pandora's box is opened, it will be hard to close.

We therefore implore the High Contracting Parties to find a way to protect us all from these dangers.

FULL LIST OF SIGNATORIES TO THE OPEN LETTER

Tiberio Caetano, founder & Chief Scientist at Ambiata, Australia.
Mark Chatterton and Leo Gui, founders, MD & of Ingenious AI, Australia.
Charles Gretton, founder of Hivery, Australia.
Brad Lorge, founder & CEO of Premonition.io, Australia
Brenton O'Brien, founder & CEO of Microbic, Australia.
Samir Sinha, founder & CEO of Robonomics AI, Australia.
Ivan Storr, founder & CEO, Blue Ocean Robotics, Australia.
Peter Turner, founder & MD of Tribotix, Australia.
Yoshua Bengio, founder of Element AI & Montreal Institute for Learning Algorithms, Canada.
Ryan Garipey, founder & CTO, Clearpath Robotics, Canada.
James Chow, founder & CEO of UBTECH Robotics, China.
Robert Li, founder & CEO of Sankobot, China.
Marek Rosa, founder & CEO of GoodAI, Czech Republic.
Søren Tranberg Hansen, founder & CEO of Brainbotics, Denmark.
Markus Järve, founder & CEO of Krakul, Estonia.
Harri Valpola, founder & CTO of ZenRobotics, founder & CEO of Curious AI Company, Finland.
Esben Østergaard, founder & CTO of Universal Robotics, Denmark.
Raul Bravo, founder & CEO of DIBOTICS, France.
Raphael Cherrier, founder & CEO of Qucit, France.
Jerome Monceaux, founder & CEO of Spoon.ai, founder & CCO of Aldebaran Robotics, France.

Charles Ollion, founder & Head of Research at Heuritech, France.
Anis Sahbani, founder & CEO of Enova Robotics, France.
Alexandre Vallette, founder of SNIPS & Ants Open Innovation Labs, France.
Marcus Frei, founder & CEO of NEXT.robotics, Germany.
Kirstinn Thorisson, founder & Director of Icelandic Institute for Intelligence Machines, Iceland.
Fahad Azad, founder of Robosoft Systems, India.
Debashis Das, Ashish Tupate, Jerwin Prabu, founders (incl. CEO) of Bharati Robotics, India.
Pulkit Gaur, founder & CTO of Gridbots Technologies, India.
Pranay Kishore, founder & CEO of Phi Robotics Research, India.
Shahid Memom, founder & CTO of Vanora Robots, India.
Krishnan Nambiar & Shahid Memon, founders, CEO & CTO of Vanora Robotics, India.
Achu Wilson, founder & CTO of Sastra Robotics, India.
Neill Gernon, founder & MD of Atrovate, founder of Dublin.AI, Ireland.
Parsa Ghaffari, founder & CEO of Aylie, Ireland.
Alan Holland, founder & CEO of Keelvar Systems, Ireland.
Alessandro Prest, founder & CTO of LogoGrab, Ireland.
Frank Reeves, founder & CEO of Avvio, Ireland.
Alessio Bonfietti, founder & CEO of MindIT, Italy.
Angelo Sudano, founder & CTO of ICan Robotics, Italy.
Shigeo Hirose, Michele Guarnieri, Paulo Debenest, & Nah Kitano, founders, CEO & Directors of HiBot Corporation, Japan.
Andrejs Vasiljevs, founder and CEO of Tilde, Latvia.
Luis Samahí García González, founder & CEO of QOLbotics, Mexico.
Koen Hindriks & Joachim de Greeff, founders, CEO & COO at Interactive Robotics, the Netherlands.
Maja Rudinac, founder and CEO of Robot Care Systems, the Netherlands.
Jaap van Leeuwen, founder and CEO Blue Ocean Robotics Benelux, the Netherlands.
Philip Solaris, founder and CEO of X-Craft Enterprises, New Zealand.
Dyrkoren Erik, Martin Ludvigsen & Christine Spiten, founders, CEO, CTO & Head of Marketing at BlueEye Robotics, Norway.
Sergii Kornieiev, founder & CEO of BaltRobotics, Poland.
Igor Kuznetsov, founder & CEO of NaviRobot, Russian Federation.
Aleksey Yuzhakov & Oleg Kivokurtsev, founders, CEO & COO of Promobot, Russian Federation.
Junyang Woon, founder & CEO, Infinium Robotics, former Branch Head & Naval Warfare Operations Officer, Singapore.
Jasper Horrell, founder of DeepData, South Africa.
Toni Ferrate, founder & CEO of RO-BOTICS, Spain.
José Manuel del Río, founder & CEO of Aisoy Robotics, Spain.
Victor Martin, founder & CEO of Macco Robotics, Spain.
Angel Lis Montesinos, founder & CTO of Neuronalbite, Spain.
Timothy Llewellynn, founder & CEO of nViso, Switzerland.
Francesco Mondada, founder of K-Team, Switzerland.
Jurgen Schmidhuber, Faustino Gomez, Jan Koutník, Jonathan Masci & Bas Steunebrink, founders, President & CEO of Nnaisense, Switzerland.
Satish Ramachandran, founder of AROBOT, United Arab Emirates.
Silas Adekunle, founder & CEO of Reach Robotics, UK.
Steve Allpress, founder & CTO of FiveAI, UK.
John Bishop, founder and Director of Tungsten Centre for Intelligent Data Analytics, UK.
Joel Gibbard and Samantha Payne, founders, CEO & COO of Open Bionics, UK.
Richard Greenhill & Rich Walker, founders & MD of Shadow Robot Company, UK.
Nic Greenway, founder of React AI Ltd (Aiseedo), UK.
Demis Hassabis & Mustafa Suleyman, founders, CEO & Head of Applied AI, DeepMind, UK.
Daniel Hulme, founder & CEO of Satalia, UK.
Charlie Muirhead & Tabitha Goldstaub, founders & CEO of CognitionX, UK.

Geoff Pegman, founder & MD of R U Robots, UK.
Mustafa Suleyman, founder & Head of Applied AI, DeepMind, UK.
Donald Szeto, Thomas Stone & Kenneth Chan, founders, CTO, COO & Head of Engineering of PredictionIO, UK.
Antoine Biondeau, founder & CEO of Sentient Technologies, USA.
Steve Cousins, founder & CEO of Savioke, USA.
Brian Gerkey, founder & CEO of Open Source Robotics, USA.
Ryan Hickman & Soohyun Bae, founders, CEO & CTO of TickTock.AI, USA.
John Hobart, founder & CEO of Corai, USA.
Henry Hu, founder & CEO of Cafe X Technologies, USA.
Zaib Husain, founder & CEO of SparkCognition, USA.
Alfonso Íñiguez, founder & CEO of Swarm Technology, USA.
Gary Marcus, founder & CEO of Geometric Intelligence (acquired by Uber), USA.
Brian Mingus, founder & CTO of Latently, USA.
Mohammad Musa, founder & CEO at Deepen AI, USA.
Elon Musk, founder, CEO & CTO of SpaceX, co-founder & CEO of Tesla Motor, USA.
Rosanna Myers & Dan Corkum, founders, CEO & CTO of Carbon Robotics, USA.
Erik Nieves, founder & CEO of PlusOne Robotics, USA.
Steve Omohundro, founder & President of Possibility Research, USA.
Jeff Orkin, founder & CEO, Giant Otter Technologies, USA.
Dan Reuter, found & CEO of Electric Movement, USA.
Alberto Rizzoli & Simon Edwardsson, founders & CEO of AIPoly, USA.
Dan Rubins, founder & CEO of Legal Robot, USA.
Stuart Russell, founder & VP of Bayesian Logic Inc., USA.
Andrew Schroeder, founder of WeRobotics, USA.
Stanislav Shalunov, founder & CEO of Clostra, USA
Gabe Sibley & Alex Flint, founders, CEO & CPO of Zippy.ai, USA.
Martin Spencer, founder & CEO of GeckoSystems, USA.
Peter Stone, Mark Ring & Satinder Singh, founders, President/COO, CEO & CTO of Cogitai, USA.
Michael Stuart, founder & CEO of Lucid Holdings, USA.
Massimiliano Versace, founder, CEO & President, Neurala Inc, USA.
Reza Zadeh, founder & CEO of Matroid, USA.