#### Conference

# Al and warfare

## Investigating the technological and political domains of current conflicts

International conference in Berlin, Germany Wednesday, 16 October – Friday, 18 October, 2024

## **CONFERENCE PROGRAMME (v3)**

Global conflicts and challenges to international security are among the most pressing issues of our time. Artificial intelligence is increasingly shaping the ways in which warfare is conducted, adding both complications and urgency to the issues caused by the current major geopolitical shifts. Al is one of the driving factors of technological change in warfare in general, with its major effects mainly related to new degrees of complexity in automation and new forms of human-machine interaction. On the one hand, this change introduces new capabilities in weapons systems, in particular in the fields of processing information, generating knowledge and the automation of decision-making. Most prominently, this results in a decreasing level of human intervention and control, thereby reshaping the relationship between human operators and autonomous weapons systems. On the other hand, Al-related developments do not only concern the kinetic dimension of warfare but also expand into what military theory calls the 'information domain'. Shaping and controlling narratives has been an integral part of conflicts and warfare for a long time, with disinformation and propaganda campaigns utilising the most recent (media) technologies for this purpose. The functionality of AI applications will increasingly be integrated in these efforts, as can already be observed with the dissemination of manipulated content on social media. Al-based technologies are also deployed in cyber warfare, which is not limited to the singular hacking of a system, but rather targeted to directly affect whole digital military infrastructures or civilian entities in politics, the economy or research.

The objective of the conference *AI* and warfare is to explore these domains of modern warfare in order to develop a more accurate picture of the various effects of AI in military contexts. Another goal is to broaden the perspective of the military deployment of AI beyond questions of weapon systems and their control, by particularly looking at adversarial uses of AI in hybrid forms of warfare in the information domain. The conference particularly aims to develop and establish a dialogue between the research on these two domains that are often explored separately.

**Wednesday, 16 October 2024** · Auditorium Friedrichstraße · Friedrichstraße 180, 10117 Berlin

17:30-18:00	Admission: Please register for this event <u>here</u> .
18:00	Opening keynote  Democracy at risk – The autocrat's spyware?  Kim Lane Scheppele (Princeton University, USA)
	<b>Discussion</b> between Kim Lane Scheppele and Jeanette Hofmann (Humboldt Institute for Internet and Society/Social Science Center Berlin); with an introduction by Tobi Müller.
19:30	Reception







### Thursday, 17 October 2024 · HIIG · Französische Straße 9, 10117 Berlin (Room: Capella)

08:15-08:45	Registration
08:45-09:00	Welcome note & Introduction
	Thomas Christian Bächle (Alexander von Humboldt Institute for Internet and Society, Berlin/University of Bonn), Christoph Ernst (University of Bonn)
09:00-10:45	Military Al technologies and practices
	Chair: Thomas Christian Bächle Alexander von Humboldt Institute for Internet and Society, Berlin/University of Bonn
	Al decision making from battlefield to desktop: The sociotechnical stakes of the techno-military-industrial pipeline
	Sarah Ciston (Alexander von Humboldt Institute for Internet and Society, Berlin)
	The biopolitics of artificial swarm intelligence – Complexity, emergence and control in military swarming
	Jens Hälterlein (Paderborn University)
	Challenges for open source investigation in the age of Al-driven warfare Patrick Brian Smith (University of Salford, UK)

#### 10:45-11:15

Coffee Break

#### 11:15-13:00

## Military AI and the political domain: Regulation, policies, control

Chair: Francesca Palmiotto

IE Law School Madrid

The very long game. 25 case studies on the global state of defence Al Joseph Verbovszky (Helmut Schmidt University/University of the Federal Armed Forces Hamburg), Heiko Borchert (Center for Advanced Security, Strategic and Integration Studies, Bonn/Helmut Schmidt University/University of the Federal Armed Forces Hamburg/The Hague Center for Strategic Studies), Torben Schütz (Council on Foreign Relations, Berlin/Helmut Schmidt University/University of the Federal Armed Forces Hamburg)

Al and future warfare: Data, targeting and death

Tanvi Tuhina (European Center for Constitutional and Human Rights, Berlin), Andreas Schüller (European Center for Constitutional and Human Rights, Berlin)

The "wicked-problem" character of multilateral efforts to control critical AI applications Georgios Kolliarakis (German Council on Foreign Relations, Berlin/European External Action Service/Service for Foreign Policy Instruments, Brussels, Belgium)

13:00-14:15

Lunch

## 14:15-16:00 Military Al and information warfare

Chair: Jens Hälterlein Paderborn University

Prebunking Al-generated disinformation: Strengthening democratic legitimacy through strategic communication

Dierk Spreen (Berlin School of Economics and Law/Bundeswehr Center of Military History and Social Sciences, Potsdam), Natascha Zowislo-Grünewald (University of the Bundeswehr Munich), Franz Beitzinger (University of the Bundeswehr Munich)

Killer robots within the Ibero-American social networks: Looking for interagency engagements

Sabrina Evangelista Medeiros (Lusófona University, Lisbon, Portugal), Luís Campani (InterAgency Institute), Samuel Martins (University Institute of Lisbon, Portugal)

Al war imaginaries: How image-generative Al models (mis)represent Russia's war against Ukraine

Mykola Makhortykh (University of Bern, Switzerland), Miglė Bareikytė (European University Viadrina Frankfurt/Oder)

16:00-16:30

Coffee Break

#### 16:30-18:00

#### Conference take-aways so far: Main themes, relevant questions, pressing issues

With inputs by:

- Georgios Kolliarakis (German Council on Foreign Relations, Berlin/European External Action Service/Service for Foreign Policy Instruments, Brussels, Belgium)
- Kim Lane Scheppele (Princeton University, USA)

Everyone is invited to join the discussion.

from 18:00

Conference day 2 concludes

## Friday, 18 October 2024 · HIIG · Französische Straße 9, 10117 Berlin (Room: Capella)

09:00-09:30	Registration & Welcome
09:30-10:45	Military AI and human-machine relations
	Chair: Jascha Bareis Karlsruhe Institute of Technology/Humboldt Institute for Internet and Society
	Redrawing expertise ecologies with sensory augmentation AI in military operations Denisa Butnaru (University of Constance/RWTH Aachen University), Adrien Bécue (Thales Group, France)
	Automation and secrecy in intelligence ethics Nicholas Johnston (University of Technology Delft, Netherlands)
10:45-11:30	Coffee break and snacks
11:30-12:45	Military AI and imaginations of future warfare
	Chair: Christoph Ernst  University of Bonn
	Microtargeting, AI and asymmetric warfare between narratives and politics Massimiliano Panarari (University of Modena and Reggio Emilia, Italy)
	The myth of "targeted killing". On responsibility of AI-powered targeting systems in the case of lavender Rainer Rehak (Weizenbaum Institute for the Networked Society, Berlin), Christian Heck (Academy
	of Media Arts Cologne)
12:45-13:30	Conference closing