

Ethics Uplift workshop: Presentations and panel discussion on ethics of autonomous systems

Organised by Trusted Autonomous Systems (TAS) and UQ Law Future of Warfare

Tuesday, 23 November 2021 | 11.00am AEST – 12.30pm AEST

Workshop will be held via ZOOM. [Register to receive the link here.](#)

Aim: To bring together ethics researchers, consultants, Defence, Government, industry, and humanitarian organisations to discuss current best practise ethical robotics, autonomous systems, and artificial intelligence (RAS-AI) in Defence.

Purpose: to share frameworks, methods, case studies, research, and consultancy programs from TAS Ethics Uplift program to assist diverse stakeholders ensure ethical RAS-AI for Defence

Intended outcomes:

1. Awareness of Australian AI governance frameworks in civilian and military applications
2. Practical tips and insights on how to ensure ethical AI on Defence projects including meeting Article 36 review requirements of new means and methods of warfare.
3. Connection to ethics, legal and safety experts including Trusted Autonomous Systems Ethics Uplift Fellows and Consultants

Workshop program

11:00 AEST START | Chair – Kate Devitt

- Australia's approach to AI Governance in Security & Defence [10min, [Kate Devitt, TAS](#)]
- Ethical AI in Defence Case Study Allied impact [10min **Dianna Gaetjens, DSTG**]
- How to prepare a Legal & Ethical Assurance Project Plan for emerging technologies anticipating an Article 36 Weapons Review [10min [Damian Copeland, IWR](#)]
- Introducing TAS Ethics Uplift Fellows
 - [Christine Boshuijzen van Burken, UNSW Canberra](#) Ethical Design of Trusted Autonomous Systems in Defence [5min]
 - [Zena Assaad, ANU Human-Machine Team](#) (HUM-T) Safety Framework for cross-domain networked autonomous systems in littoral environments [5min]
- Ethical and legal questions for the future regulation of spectrum [5min, **Chris Hanna**]
- The ethics of the electromagnetic spectrum in military contexts [10min, [Kathryn Brimblecombe-Fox](#)]
- Discussion [30min **Kate Devitt** will Chair]

12:30 AEST END

Workshop speakers

Kate Devitt, Trusted Autonomous Systems

Kate Devitt is the Chief Scientist of Trusted Autonomous Systems. She is a transdisciplinary science leader, using expertise in philosophy to enable the development of autonomous systems that incorporate ethical, legal, and regulatory structures to achieve social license to operate and trusted adoption.



Dianna Gaetjens, DSTG

Dianna is a foreign policy and international relations professional with particular expertise in the Pacific and North Asia regions. Working for the Department of Foreign Affairs and Trade, she was posted to Tokyo before returning to the Department of the Prime Minister and Cabinet. In recent years, she has focused on critical technologies (particularly AI) and the role of technology as a lever of power in geostrategic competition. With a Masters of Cybernetics combined with undergraduate studies in philosophy and history/politics, she now works at DST Group on AI and data, with a particular interest in responsible AI.

Damian Copeland, International Weapons Review

Damian Copeland is a legal practitioner whose expertise and doctoral studies are in the Article 36 legal review of weapons, specifically focused on weapons and systems enhanced by Artificial Intelligence. He is a weapons law expert with over thirty years military service, including multiple operational deployments where he has extensive experience in the application of operational law in support of Australian Defence Force operations.



Christine Boshuijzen-van Burken, UNSW Canberra

Christine Boshuijzen-van Burken holds a PhD degree in ethics and philosophy of technology. Christine currently works as senior researcher at UNSW at the Australian Defence Force Academy (ADFA) in Canberra, and at QUT in Brisbane. Her current research is on Value Sensitive Design of autonomous systems. Besides her academic work, Christine serves as a reserve soldier at the Royal Netherlands Reserve Army.



Zena Assaad, Australian National University

Zena Assaad is an aerospace engineer and lecturer working across projects that explore autonomy and autonomous technology, aviation and its human factors, meaningful human control and emerging technology in general. Zena worked on Australia's first satellite-based augmentation systems project and as a research specialist with Australia's aviation regulatory body. Zena is now a lecturer at the School of Cybernetics at the Australian National University.



Chris Hanna

Chris Hanna is a lawyer practising in the Australian Capital Territory. He served as a Legal Officer in the permanent Royal Australian Air Force (RAAF) during the period 1990 to 2018 before transferring to the Reserve. Chris' last role in the permanent RAAF was as Director General Australian Defence Force Legal Services. He has extensive experience in military and government law.



Kathryn Brimblecombe-Fox

Kathryn Brimblecombe-Fox is an artist, PhD candidate at Curtin University and Honorary Research Fellow, School of Communication and Arts, University of Queensland. Kathryn is interested in how technology is mediating the human existence, for good and bad. She 'plays' with cosmic landscapes and the age-old transcultural/religious tree-of-life, often juxtaposing them with various elements or products of technology eg: unmanned air vehicles, commonly called drones + binary code. Her PhD research examines contemporary militarised technology.



Ethics uplift program

The EUP supports theoretical and practical ethical AI research and advisory services which will enhance industry's capability for building ethical and deployable trusted autonomous systems for Australian Defence.

In 2021, the Australian Department of Defence released [A Method for Ethical AI in Defence](#) (MEAD) Technical Report co-authored by TAS, RAAF Plan Jericho and Defence Science & Technology Group (DSTG).

The TAS Ethics Uplift Program (EUP) is implementing and extending MEAD with researchers, consultancies collaborating with Defence Industries for ethical, legal and safe autonomous systems and pragmatic risk management practises.

What difference will it make?

The Ethics Uplift Program (EUP) offers immediate and ongoing assistance to Centre Participants to build their capacity to include ethical practices during the design, test and evaluation of autonomous systems, including:

- Australian-based and internationally regarded ethics, law, and safety frameworks for autonomous systems design, test, evaluation, and operationalisation
- Enable industry to demonstrate capable, ethical, legal, and safe autonomous assets operating alongside people
- Achieve industry buy-in through adoption of frameworks, commitment to ethical risk management and technology demonstrations cognisant of ethical, legal and safety factors
- Achieve Defence's buy-in to frameworks, comprehension and understanding of autonomous systems technologies through demonstration

This program is an investment by TAS with Defence and other participants which is accelerating and fostering a sustainable capability for ethical and legal sovereign RAS-AI Defence Industries in Australia.

TAS contacts

For more information, contact:

- Chief Scientist Dr Kate Devitt (kate.devitt@tasdcrc.com.au)
- Trust Activities Coordinator Dr Tara Roberson (tara.roberson@tasdcrc.com.au)