



inaugural DAIRNet symposium

9.00 – 16.30 (AEDT), 18 November 2021

Webinar

Artificial intelligence (AI) is a collection of computational methods and interrelated technologies that allow tasks to be undertaken and solved by machines that would typically require human intelligence.

By 2030, it is estimated that digital technologies (including AI) will have a potential worth of \$315 billion to the Australian economy and an additional 161, 000 new AI specialists will be needed to sustain the industry.

Building AI capabilities in Australia is critical for the Defence sector. Decision superiority, the ability to make decisions faster and with higher degrees of accuracy, will increasingly benefit from advancements in sovereign AI capabilities and enable Defence to process large quantities of data in complex operating environments. These advancements in AI will provide data-driven performance advantages to the Australian Defence Force.

The Defence AI Research Network (DAIRNet) is an initiative through the Department of Defence and the Next Generation Technologies Fund (NGTF). DAIRNet aims to establish and sustain a community of AI researchers who work together in an environment that stimulates new ideas and knowledge and supports evaluation, testing and integration of novel technology into the Defence ecosystems.

This inaugural symposium will highlight the current and future trends and needs in AI and how Defence, industry and academia can work together to build sovereign AI capabilities.

PARTNERS



Session 1: Opening

Welcome and introduction

MC A/Professor Jason Whittle, Director DAIRNet, University of South Australia
Mr Andrew Seedhouse, Chief of the Intelligence, Surveillance and Space Division (ISSD)

DAIRNet and AI Science and Technology program

Dr Brian Hanlon, Principal Scientist – AI, DSTG
A/Professor Jason Whittle, Director DAIRNet, University of South Australia

Chief Defence Scientist Fellowship update

Dr Angela Consoli, CDS Fellow, DSTG

Session 2: The future of AI

The Future of Defence AI

Lieutenant Colonel Stephen Fry, Director, Defence AI Centre

Discussion: forward looking research in AI

Lieutenant Colonel Stephen Fry, Director, Defence AI Centre
Dr Ralph Gailis, Specialist Science Adviser - AI, DSTG
Professor Hussein Abbass, University of New South Wales

Future trends in AI

A/Professor Jamie Sherrah, Australian Institute for Machine Learning, University of Adelaide

Session 3: Working with Defence

Working with Defence: DAIRNet project updates

Dr Justin Fidock, Group Leader of Human Domain Analytics, DSTG
Professor Chris Fluke, Swinburne University
Professor Frank den Hartog, University of New South Wales
Professor Matt Duckham, RMIT
Dr Yuan-Fang Li, Monash University

Chief Defence Scientist

Professor Tanya Monro

Session 4: AI in industry

AI in industry

Dr Aaron Hector, Senior Data Scientist, BAE Systems, Red Ochre Labs

Discussion: What does the Australian AI industry need?

Colonel Kirk Johnstone, Chief Information Officer Group
Dr Aaron Hector, BAE Systems, Red Ochre Labs
Dr Sebastien Wong, DSTG
Dr Mark McDonnell, Consilium Technology

Discussion: What's next for Defence AI?

Dr Axel Bender, STaR Shot Lead, Operating in CBRN Environments, DSTG

Closing remarks

Dr Brian Hanlon, Principal Scientist – AI, DSTG

