

Australian Institute for Machine Learning



[Blog](#)

[Newsroom](#)

[Research](#)

Community address

Welcome to the Autumn 2025 issue of the AIML newsletter.

There's a growing narrative that meaningful machine learning research is no longer possible outside of the major AI companies, and that access to large-scale compute is now the gatekeeper of progress.

This view is wrong, not least because it misses the bigger picture.



In reality, there has never been a better time to be an academic researcher in machine learning. The field is evolving rapidly, reshaping industries, and delivering foundational breakthroughs with remarkable frequency. More importantly, academia remains the one environment with the freedom to pursue bold, unconventional ideas — and to critically examine the assumptions underpinning current methods.

As the questions get deeper and our understanding of the technology grows, the need for open, rigorous and courageous research is urgent. This is where the future of the field will be shaped. There is a long way to go yet, and there's never been a more exciting time to be driving change.

Professor Anton van den Hengel



Industrial AI SME Program Launch

Find out how an Industrial AI SME grant can help your SME adopt AI to drive results

DELIVERING WELCOME

HOST

HOST

Michael Brown MP
Assistant Minister to the Premier for AI and the Digital Economy

Dr Kathy Nicholson
AIML Institute Manager

Jonathon Read
AIML Engineering Manager

With insights from South Australian business owners and engineers

Register for the event
Tuesday, 3 June 2025 | 1:30-3:00 PM (ACST)

Logos: Government of South Australia, THE UNIVERSITY of ADELAIDE

AIML invites you to the formal launch of the Industrial AI SME Grant Program

Supported by the Government of South Australia, the Industrial AI SME Grant Program will assist South Australian small and medium enterprises (SMEs) looking to adopt AI into their operations through:

- **AI Road Map grants** which are designed to help businesses identify and harness the potential of AI and machine learning.
- **ML Innovate grants** to assist SMEs in delivering bespoke AI solutions.

Instead of cash, these grants offer invaluable access to AIML's machine learning engineers, providing tailored support to elevate your AI and machine learning capabilities.

The launch will include:

- A welcome from Michael Brown, Assistant Minister to the Premier for AI and the Digital Economy
- An introduction to the Industrial AI SME program including application information and an informational video detailing AIML's extensive work supporting local companies with adopting AI
- Insights from SMEs with tips on their AI adoption journey
- Q&A with AIML's Institute Manager, Dr Kathy Nicholson, and Engineering Manager, Jonathon Read

Questions from attendees will be answered during the discussion so have your questions handy. **Click the link below to register.**

Register for the event

The role of AI in the future of business

[Read more](#)



On 11 April 2025, government and industry representatives gathered at the AIML building for a lively and thought-provoking discussion on the evolving role of AI in the future of business. The event, titled Generative & Agentic AI for Business, was hosted by the [National Artificial Intelligence Centre \(NAIC\)](#) and the [Australian Industry Group \(Ai Group\)](#), a national employer organisation representing traditional, innovative, and emerging industry sectors.



The CAR Catalyst Program hits the accelerator

Over the past 13 weeks, AIML has partnered with deep-tech venture capital firm Main Sequence to co-lead the Centre for Augmented Reasoning's (CAR) Catalyst Program. This initiative has supported 10 teams by accelerating their journey from product development to market entry, providing essential tools, resources, and mentorship to help them succeed in today's competitive business environments.

AI for outreach at the Adelaide City Library



Dr Jinan Zou, AIML postdoctoral researcher and AI Education and Outreach Liaison for the Responsible AI Research (RAIR) Centre, and his team of AIML interns Brian Drake and Clark Zhang, led a hands-on session titled Explore AI's Creative Potential at the Adelaide City Library on 14 April 2025. The workshop invited children ages 12–15 to

use cutting-edge AI tools to create their own digital art and music.



Cross-institutional team awarded AEA Ignite Grant

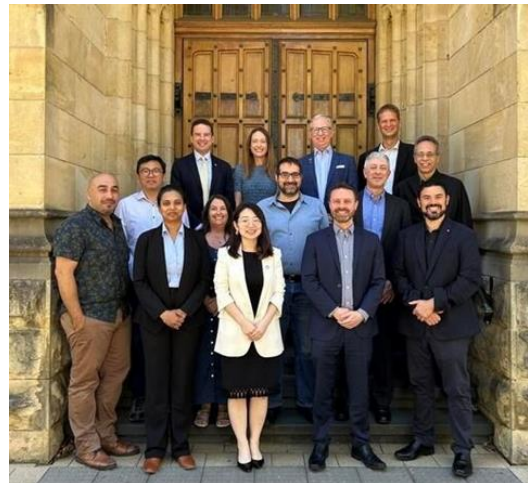
[View all recipients](#)

AIML members Dr Yuan Zhang and Dr Tim Chen, Robinson Research Institute investigators Professor Louise Hull and Dr Jodie Avery, and the entire IMAGENDO® team have been awarded \$498,291 AUD in funding from the Australia's Economic Accelerator (AEA) Ignite Grants. The AEA Ignite Grants support high-impact research and commercialisation projects across Australian universities.

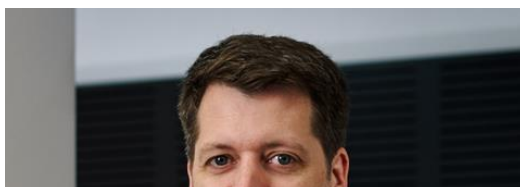
The funding will support the IMAGENDO® study which is are pioneering the use of AI and machine learning to reduce diagnostic delays for endometriosis. By combining data from transvaginal ultrasound (TVUS) and magnetic resonance imaging (MRI) scans, the study aims to develop an algorithm that can determine the probability of an endometriosis diagnosis much faster. This breakthrough could significantly improve patient quality of life, fertility outcomes, and pain management by enabling earlier intervention.

UK-Australia research alliance poised to fast-track advances in space, AI, and cybersecurity

[Read more](#)



The University of Adelaide and the University of Surrey in the United Kingdom have embarked on an ambitious partnership designed to cultivate innovative research across multiple scientific domains, including AI, sustainability, space exploration, and cybersecurity. This international alliance will establish eight, cutting-edge projects, each co-led by researchers from both institutions.



AIML appoints Stefan Podgorski to Principal



Engineer

[Read more](#)

AIML is pleased to announce the appointment of Stefan Podgorski, AIML Senior Research Engineer, to Principal Engineer. In his new role, he will continue his work with the AIML Industry Solutions team to provide innovative, customer-centric AI solutions as well as support businesses looking to adopt AI into their operations.

Dr Xinyu Zhang wins at the 2025 Women Leading Tech Awards

[View all winners](#)



Congratulations to AIML Research Fellow Dr Xinyu Zhang who won in the Education/Research category at the 2025 Women Leading Tech Awards in Sydney on 28 March 2025. Presented by Atlassian, these awards celebrate the women who drive innovations and forge new paths for others to follow.

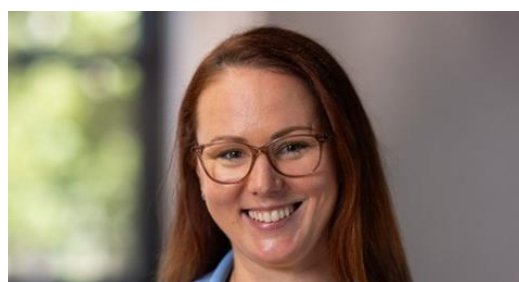


Professor Anton van den Hengel elected as Chair for the Kingston AI Group

[Learn more](#)

Congratulations to Professor Anton van den Hengel who was named Chair of the Kingston AI Group in a group meeting on 21 March 2025. Established in 2022, the Kingston AI Group includes 14 leading professors of AI from eight universities across Australia.

Dr Melissa McCradden named 40 Under 40 Finalist





Congratulations to AIML Deputy Director Dr Melissa McCradden on being named a finalist in the 40 Under 40 awards. Hosted by *InDaily* and *CityMag*, the awards recognise South Australia's rising leaders who are making outstanding contributions across business, innovation, and community.

[Our people](#)[Opportunities](#)[Past events](#)

Translating an AI algorithm for antenatal hydronephrosis

For our third AI on the Ground seminar, we virtually welcomed Mandy Rickard, nurse practitioner at The Hospital for Sick Children (SickKids) in Toronto, and Dr Lauren Erdman, a computer scientist at Cincinnati Children's Hospital.

Both joined host, AIML Deputy Director Dr Melissa McCradden, to discuss shared valuable insights behind the Hydronephrosis Severity Index (HSI) — a machine learning model that's designed to help clinicians predict which infants with antenatal hydronephrosis (a kidney-related condition found in up to 5% of pregnancies) might require surgery.

[Watch the seminar](#)

Interested in this series?

[Follow us on LinkedIn](#) to be informed of our next AI on the Ground seminar to be held in-person at AIML and online via Zoom.

National Industry PhD Program Scholarship

Applications are now open for a fully funded PhD project through the [National Industry PhD Program](#), jointly offered by the University of Adelaide and Lockheed Martin Australia. This project will explore the development of Physics-Informed Neural Networks (PINNs) for efficient signal modelling in areas such as weather prediction, fluid

LOCKHEED MARTIN



dynamics, and space exploration. **Deadline to apply is 30 June 2025.**

[Apply now](#)



Lockheed Martin Australia – Advanced Systems & Technology (LMA–AST) Scholarship

An opportunity is available for exceptional honours or master's by coursework students to develop novel deep learning algorithms and multi-object tracking methods for autonomous flight systems with Dr Feras Dayoub, AIML's Embodied AI and Robotic Vision Research Group Lead. **Applications open until filled.**

LOCKHEED MARTIN 



[Apply now](#)

CSIRO Next Generation Graduates Program (NGGP) Scholarship

The CSIRO NGGP Scholarship has been established to support exceptional students engaged in advanced research in computer vision. The scholarship is valued at \$15,000 payable in two equal instalments after each census date in March and August. **Applications open until filled.**



[Apply now](#)

To learn more about our scholarships, visit our website.

[View all available scholarships](#)

[Bluesky](#)

[LinkedIn](#)

[YouTube](#)

AIML blog recap

[Two AI Winters and a Neural Spring: The Case for Patience in R&D](#)

What if the next AI breakthrough isn't found in a product pitch, but in a paper no one reads for 10 years? AIML's Institute Manager Dr Kathy Nicholson reflects on decades of patient R&D, reminding us that today's AI moment was built yesterday, and that Australia's future in AI depends on funding curiosity, not just commercialisation.



[Why aren't businesses seeing the benefits of AI? The data privacy challenge in Australia](#)

Dr Jamie Sherrah, Adjunct AIML member, warns that overseas-hosted AI tools pose data privacy risks for Australian businesses, highlighting compliance challenges under local laws. He advocates for sovereign AI solutions to ensure data security and responsible adoption.



[Making science heard: lessons from Science Meets Parliament 2025](#)

Dr Miguel Balbin, AIML's Digital Content Officer, shares his experience at this year's Science meets Parliament event (SMP2025) and highlights the critical role of science communication in bridging the gap between researchers and policymakers in Australia.



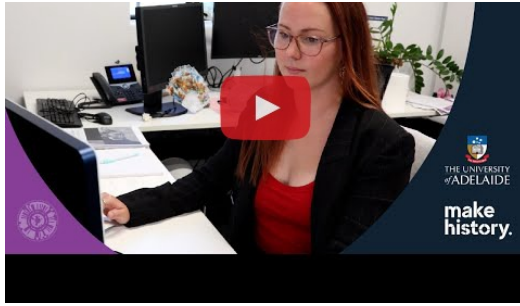
Follow us on Medium

Read more articles from AIML members by following the [AIML Medium page](#).



Our community's research in focus

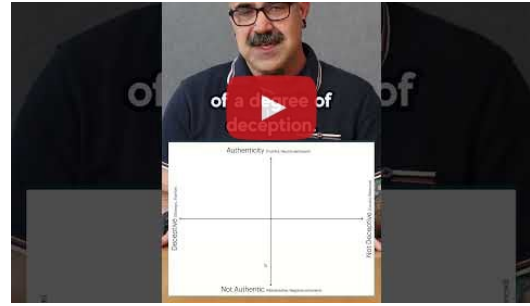




Building ethical AI frameworks

Dr Melissa McCradden's work involves ensuring that machine learning and data science technologies are not only ethically sound, but also aligned with the the needs of the larger healthcare system. She works with teams to develop frameworks for testing, evaluating, and integrating AI tools, and examines how AI models perform in real-world clinical contexts before they directly impact patient care.

[Watch the interview](#)



Can AI spot a lie just by looking at the signs?

By tapping into semiotics, the study of signs and symbols, Dr Jason Pittman, Fulbright Scholar and AIML Visiting Researcher, reveals how certain patterns in written language can signal disinformation. These subtle cues can be used to develop AI systems that flag misleading or manipulative content.

[Watch the short video](#)

What is foundational AI, and why does it matter?



[Watch the explainer](#)

This year, the Commonwealth Bank hosted a booth at the International Conference on Learning Representations (ICLR), one of the world's premier AI research conferences, to showcase current initiatives and research focuses for the CommBank Centre for Foundational AI Research.

We thank AIML's Jessica Cortazzo, Professor Simon Lucey, Professor Anton van den Hengel, and Dr Hemanth Saratchandran, alongside CommBank partners Anna Leontjeva, Sabina Streatfeild, Arun K Lenin, and Padma Arni, for representing the Centre and engaging with the global research community.





Follow us on YouTube

See our upcoming videos on your feed by subscribing to the [AIML YouTube channel](#).



Share this newsletter

We invite you to share this newsletter broadly with your network. Those interested can subscribe to our mailing list to receive quarterly updates from AIML.

[Sign up to our mailing list](#)

Copyright © 2025 The University of Adelaide / Australian Institute for Machine Learning (AIML).
CRICOS Provider Number 00123M



You are receiving this email because you are a staff member, student or alum of the University of Adelaide / Australian Institute for Machine Learning (AIML), or you have signed up to receive information from us.

[Our privacy policy](#).

[Unsubscribe](#)