

AIML Newsletter — Spring 2024

Australian Institute for Machine Learning



[Blog](#)

[Newsroom](#)

[Research](#)

Community welcome



It's my pleasure to welcome you to the **Spring 2024 Issue** of the AIML newsletter, now launching in a fresh, quarterly format.

As the recently appointed Digital Content Officer, I'm thrilled to take on the role of sharing AIML's stories with our community of internal and external stakeholders. In just a few months here, I've been greatly inspired by the incredible research and innovation happening across our institute.

One of the most rewarding parts of my role is highlighting the work of AIML members by putting them in front of the camera. This gives them a platform to share their groundbreaking advancements in artificial intelligence (AI) and machine learning (ML) with a broader audience, sparking important conversations about the future of these technologies.

We hope you enjoy this issue and invite you to stay connected with us through the links provided in this newsletter.

Dr Miguel Balbin

'AI is the technology of the century'

[Read more](#)



The Julia Gillard Annual Public Lecture, named after the Hon. Julia Gillard AC, University of Adelaide Visiting Honorary Professor and Australia's 27th and only female Prime Minister, has become a key forum for addressing many of Australia's most pressing issues. This year's lecture centred on the impact of AI on Australia and the world, featuring a panel of AI experts to explore the future of this transformative technology.



AIML members and AI shine in 2024 Research Showcase

[Read a recap of the day](#)

On October 16, 2024, our community members presented their remarkable work at the AIML Research Showcase held at the National Wine Centre of Australia. We extend special thanks to Associate Professor Angela Yao, Computer Vision and Machine Learning Lead at the National University of Singapore, who traveled to Adelaide to connect with our community and deliver a captivating keynote on "Understanding Videos with Large Language Models."

Unveiling the new CommBank Centre for Foundational AI Research

[Learn more](#)



We're excited to announce a new strategic partnership between the University of Adelaide and the Commonwealth Bank of Australia (CommBank) to advance pioneering ML research in financial services. This five-year collaboration will establish the co-branded

CommBank Centre for Foundational AI Research at AIML, reinforcing South Australia's role as a leader in foundational AI research.



Funding for more resilient data-driven electricity grids

[Read more](#)

Congratulations to Dr Ehsan Abbasnejad, Director for Responsible AI and Future Making Fellow at AIML, for his valuable contributions to an international research initiative aimed at improving the durability and efficiency of electrical grids. Funded by the Franco-Australian Centre for Energy Transition (FACET) with over \$350,000 AUD in support, this collaboration unites experts from the University of Adelaide and Université Grenoble-Alpes, a public research university in Grenoble, France. The project focuses on leveraging AI and ML to develop innovative solutions for managing complex power systems in sustainable ways.

Funding awarded to advance asbestos detection

[Read more](#)



Congratulations to Dr Greg Ruthenbeck, AIML's Lead Machine Learning Engineer, on his work as a Chief Investigator on the project *Real-time detection of Asbestos in the field*. The project, led by Professor Nigel Spooner from the School of Physics, Chemistry and Earth Sciences, was recently announced as an ARC Linkage recipient and awarded \$675,816 AUD in funding. The initiative seeks to develop a new portable device that can be used to detect asbestos in homes or workplaces. Developing this mechanism could have significant public health benefits by reducing the public's exposure to hazardous asbestos dust.

[Our people](#)

[Opportunities](#)

[Past events](#)

How do we build a responsible



ecosystem for AI in health?

AI on the Ground is a new interdisciplinary seminar series focusing on the real-world issues of implementing AI- and ML-based tools in medical settings.

For our first seminar, host Dr Melissa McCradden, an AIML academic, welcomed Associate Professor Xiaoxuan Liu and Professor Alastair Denniston from the University of Birmingham who discussed how to safely and equitably implement AI systems into healthcare protocols.



[Watch the seminar](#)

Interested in this series?

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

Industrial AI Program Scholarships

Industrial AI Program Scholarships are available for students undertaking their honours or higher degree by research (HDR) studies in AI and machine learning. Funded by the state government, these scholarships are available for honours, master's by research, and PhD students.

For more information, including eligibility and application details, please refer to:

[Industrial AI Scholarship \(Hons\)](#)

[Industrial AI Supplementary Scholarship \(MPhil\)](#)

[Industrial AI Scholarship \(PhD\)](#)

AIML Research Scholarships

AIML Research Scholarships support exceptional students engaged in advanced research in AI and machine learning. These scholarships are available for students undertaking their honours and postgraduate by coursework degrees.

For more information, including eligibility and application details, please refer to:

[AIML Research Scholarship \(Semester 1, Trimester 1&2, 2025\)](#)

[AIML Research Scholarship \(Semester 2, Trimester 3&1, 2025\)](#)

[X \(formerly Twitter\)](#)

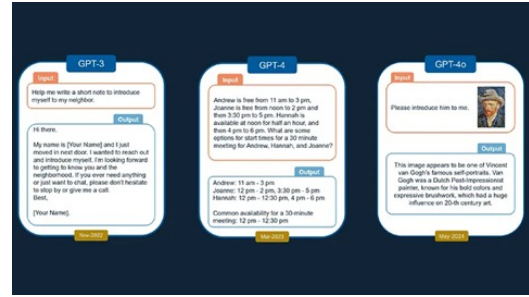
[LinkedIn](#)

[YouTube](#)

AIML blog recap

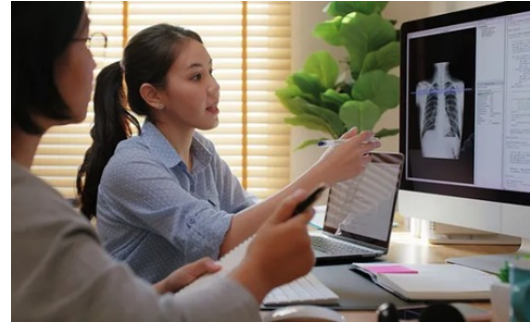
Rise of the AI tools

AIML Postdoctoral Research Fellow Dr Xinyu Wang presents an overview of the evolution of large language models (LLMs), highlighting how AI tools can now enable the creation of content that was unimaginable just a few years ago.



The human-AI relationship in medicine — why should we care?

AIML PhD student and cognitive psychology researcher Lana Tikhomirov discusses how human unpredictability can affect the use of AI in health and other socio-technical settings.



Imagine a world without AI

AIML Chief Scientist Professor Anton van den Hengel contends that Australia is an "AI lightweight" and advocates for building sovereign AI capabilities to keep more innovation, and Australian investment, within the country.



Follow us on Medium

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



Annual Report 2023

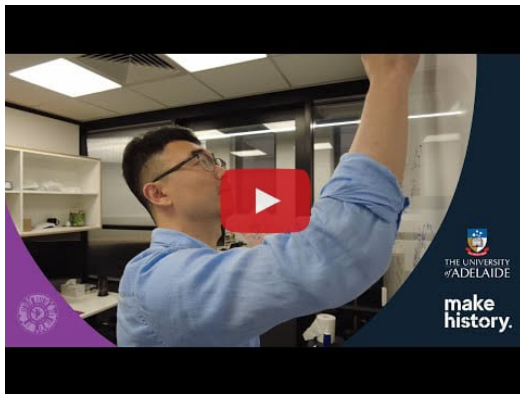
Read the 2023 Annual Report and explore how AIML has driven impactful advancements in the fields of AI and ML. Since 2017, AIML has grown to become Australia's largest university-based machine learning research group and continues to shape the industries and jobs of tomorrow.

[Read report](#)



AIML CHANNEL

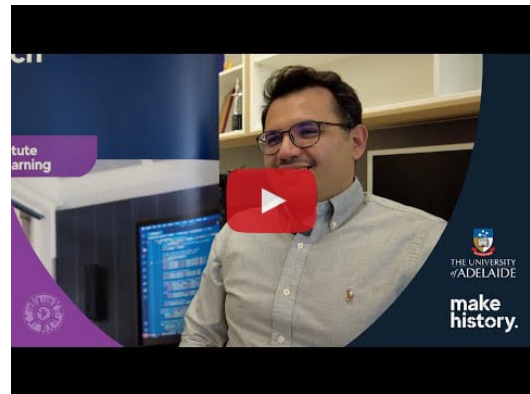
Our community's research in focus



Models for multitasking

Dr Frederic Zhang researches 'task vectors' — improving how ML models can handle multiple tasks at once. His research aims to enhance the efficiency and versatility of these models, making them more effective when training data is limited.

Watch our Researcher Spotlight series



Responsible AI

Dr Ehsan Abbasnejad leads research that is focused on making AI models more safe and reliable. His team works to understand the inner workings of neural networks and explores applications of AI in diverse fields, including healthcare, agriculture, and energy management.

Watch our Academic Interview series

Follow us on YouTube

Stay updated with our upcoming videos by subscribing to the [AIML YouTube channel](#).



Share this newsletter

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

Sign up to our mailing list



**Australian
Institute
for Machine
Learning**

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](#)