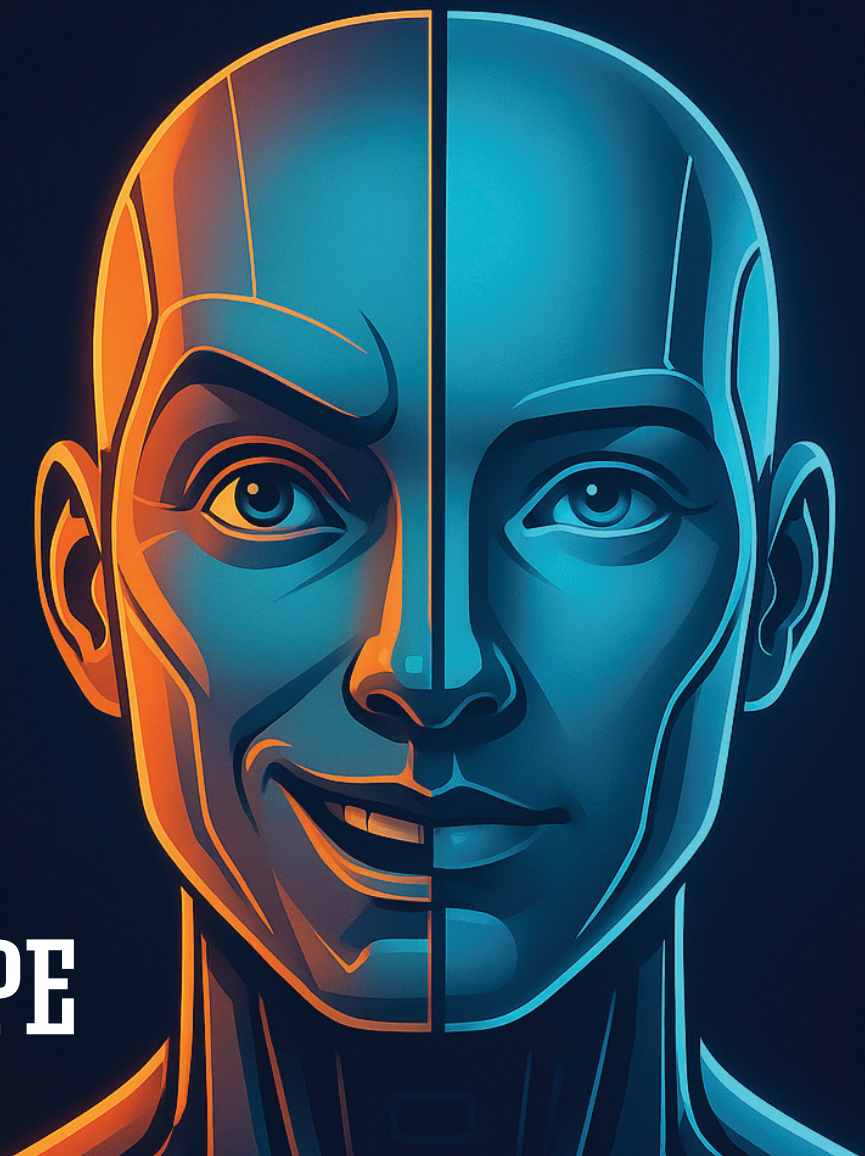


AI

THE HOPE AND THE HYPE



Thursday 6 November

9:00am–5:00pm AEDT

Government House Sydney | In person, by invitation, and live-streaming



Australian
Academy of Health and
Medical Sciences



Australian
Academy of the
Humanities



Australian
Academy of
Science



ACADEMY OF
THE SOCIAL SCIENCES
IN AUSTRALIA



Australian Academy of
Technological Sciences
& Engineering
1975-2025



The Forum is held under the auspices of Her Excellency the Honourable Margaret Beazley AC KC, Governor of New South Wales. The Royal Society of New South Wales acknowledges the generous support of Her Excellency and the Office of the NSW Chief Scientist and Engineer.

The Royal Society of New South Wales
& Learned Academies Forum 2025

AI

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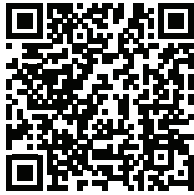
Government House Sydney | In person, by invitation, and live-streaming

Artificial intelligence today sits at the crossroads of grand hopes and rampant hype. Optimists point to extraordinary investments – tech giants like Microsoft, Amazon, Meta, and Alphabet pumping hundreds of billions of dollars into AI infrastructure – as catalysts for growth and efficiency. In the US, AI-driven capital expenditures in the second quarter of this year accounted for nearly half of that quarter’s 3% GDP gain. McKinsey forecasts \$7 trillion in AI investment over the next five years, fuelling narratives of transformative potential.

This wave of optimism has also reached Australia. Political leaders – including Treasurer Jim Chalmers – note “We see AI as a huge opportunity for Australia, it’s a key part of our productivity agenda, an absolute game changer”, aligning with Productivity Commission projections of AU\$116 billion in gains over the next decade and a 4.3 percentage-point boost in labour productivity. This marks a significant shift from the earlier priority on safe, ethical deployment to one of economic opportunity.

This shift extends beyond Australia. In the United Kingdom, the new Labour government’s AI Opportunities Action Plan–backed by £14 billion in private-sector investment–marks a clear pivot from previous safety-centred messaging to one emphasising “opportunity and growth.” However, history offers a cautionary note–productivity gains are rarely distributed evenly. A recent Nature paper, *Bridging the Digital Divide*, examined data from 59 countries over 25 years and found that while technological innovation can enhance connectivity and efficiency, it has often exacerbated income inequality, especially in developed economies.

And then there is the question of whether these forecast productivity gains are realistic. Many economists urge



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Registration &
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caution. Torsten Sløk, Apollo’s chief economist, warns the AI bubble may rival the 1990s dot-com boom, while Nobel laureate Daron Acemoglu estimates AI may automate only 5% of jobs and contribute approximately 1% to global GDP this decade, a non-trivial but modest effect, and certainly much less than the revolutionary changes some are predicting. Emily M. Bender’s *The AI Con* also challenges techno-optimism by characterising many AI systems as “sophisticated illusions” that mimic understanding without genuine comprehension, underpinned by invisible labour and structural inequality.

A more balanced view is given by Narayanan and Kapoor, in *AI as Normal Technology*, urge us to understand AI as akin to electricity or the internet–transformative but gradual, institutionally mediated–not as a sudden rupture, tempering both utopian and apocalyptic visions.

This evolving discourse on AI’s impact is at the heart of the upcoming Royal Society of NSW Forum Day: “AI: The Hope and The Hype.” The event’s sessions, AI in Communities, AI for Health, AI and the Law, AI in Practice, and AI Research & Future Directions, offer a timely platform to explore how AI’s promise intersects with productivity, equity, governance, and societal impact.

At its core, the tension remains between hype – exuberance untethered from evidence, and hope – grounded optimism shaped by governance, ethics, and fairness.

As we confront this new technology, a critical question emerges: Is AI truly different from previous transformative technologies–like electricity or the internet – or is it simply another innovation riding waves of hype?



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AI

THE HOPE AND THE HYPE

OPENING

9:00am-9:25am

Official opening	Her Excellency the Honourable Margaret Beazley AC KC – Governor of New South Wales
Welcome & acknowledgements	Emeritus Professor Christina Slade FRSN FRSA – President and Forum Chair, Royal Society of New South Wales
Introductory address	The Hon. Victor Dominello – CEO, Future Government Institute and former NSW Minister for Customer Service and Digital Government

KEYNOTE

9:25am-10:00am

Chair	Professor Sally Cripps FRSN – Director Technology, Human Technology Institute, University of Technology Sydney, and Forum Program Chair
Keynote speaker	Professor Pascal Van Hentenryck FAAAI – A. Russell Chandler III Chair and Professor, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

PANEL SESSION 1: AI AND THE LAW

10:00am-11:00am

Chair	Emeritus Professor Rosalind Croucher AM FRSN FAAL – Information Commissioner and CEO, NSW Information and Privacy Commission
Speakers	The Hon. Dr Annabelle Bennett AC SC FAA FAAL The Hon. Justice Melissa Perry FAAL – Federal Court of Australia Professor Lyria Bennett Moses FRSN FASSA FAAL – School of Law, Society and Criminology, Faculty of Law and Justice, UNSW Sydney

MORNING TEA

11:00am-11:30pm

PANEL SESSION 2: AI IN COMMUNITIES

11:30am-12:30pm

Chair	Professor Sally Cripps FRSN – Director Technology, Human Technology Institute, University of Technology Sydney and Forum Program Chair
Speakers	Professor Jill Bennett – Scientia Professor and Australian Research Council Laureate Fellow, UNSW Sydney Dr Stephen Hardy – Partner, Bain & Company Dan Hart – General Manager AI, University of Sydney Jacky Hodges – Chief Data Officer and co-Chief AI Officer, NSW Department of Education



AI

THE HOPE AND THE HYPE

PANEL SESSION 3: AI IN HEALTH	
12:30pm-1:30pm	
Chair	Professor Michael Blumenstein FRSN – Pro Vice Chancellor (Business Creation and Major Facilities), University of Technology Sydney
Speakers	Dr Sean Baldwin – Deputy Chief Medical Information Officer for Northern Sydney LHD, NSW Health Dr Simon Carlile – Senior Staff Research Scientist, Google Research (Australia) Dr Amandeep Hansra FRACGP FACHI ACCAM – General Practitioner and Chief Clinical Adviser (Medicine), Australian Digital Health Agency Dr Richard Taggart – Chief Executive at eHealth NSW and Chief Information Officer for NSW Health

LUNCH
1:30pm-2:30pm

PANEL SESSION 4: AI IN PRACTICE	
2:30pm-3:30pm	
Chair	Professor Mary-Anne Williams FTSE FACS FAAAAI – Michael J Crouch Chair for Innovation, UNSW Sydney
Speakers	Ros Harvey – President, Australian Conservation Foundation Dan Jermyn – Chief Decision Scientist, Commonwealth Bank of Australia Professor Salah Sukkarieh FTSE FIEEE – Professor of Robotics and Intelligent Systems, Australian Centre for Robotics, University of Sydney

PANEL SESSION 5: AI RESEARCH — FUTURE DIRECTIONS	
3:30pm-4:30pm	
Chair	Professor Hugh Durrant-Whyte FRS FREng FAA FIEEE HonFIEAust – NSW Chief Scientist & Engineer
Speakers	Distinguished Professor Jie Lu AO FIEEE FIFSA FACS – Director, Australian AI Institute, Faculty of Engineering and Information Technology, University of Technology Sydney Professor Toby Walsh FRSN FAA FTSE FACM FAAAS FAAAAI – ARC Laureate Fellow and Scientia Professor of AI at UNSW Sydney Professor Lina Yao – Senior Principal Research Scientist and Science Lead for Translational Machine Learning, CSIRO Data61 Professor Pascal Van Hentenryck FAAAAI – A. Russell Chandler III Chair and Professor, H. Milton Stewart School of Industrial and Systems Engineering, Georgia Institute of Technology

CLOSING SESSION	
4:30pm-5:00pm	
Chair	Professor Hugh Durrant-Whyte FRS FREng FAA FIEEE HonFIEAust – NSW Chief Scientist & Engineer

OFFICIAL OPENING

Her Excellency the Honourable Margaret Beazley AC KC

Governor of New South Wales



Her Excellency the Honourable Margaret Beazley AC KC is the 39th Governor of New South Wales, commencing her five-year tenure on 2 May 2019. Prior to her appointment, Her Excellency enjoyed a long and distinguished law career spanning 43 years, during which time she served as a role model for women in law at both the state and national level. Appointed Queen’s Counsel in 1989, in 1993 she was made a judge of the Federal Court of Australia, the first woman to sit exclusively in that Court. In 1996, she achieved the distinction of being the first woman appointed to the New South Wales Court of Appeal and, subsequently, the first woman to be appointed as its President. She was made a Companion of the Order of Australia in the Australia Day Honours List on 26 January 2020 for “eminent service to the people of New South Wales, particularly through leadership roles in the judiciary, and as a mentor of young women lawyers”.

Christina Slade FRSN FRSA



Christina Slade as served as a senior academic and administrator in Australia, Europe, the US and Mexico. She was Vice-Chancellor and Chief Executive of Bath Spa University, the Dean of Arts and Social Sciences at the City University London and Macquarie University’s Dean of Humanities. She was Professor of Media Theory with the University of Utrecht and interim Rector of Charles Sturt University. Professor Slade serves on the UK based Board of QS rankings and the National Art School in NSW.

While based in the UK she was Chair of University of Gibraltar’s Academic Board, Trustee and Chair of the Audit and Risk Committee of the Association

of Commonwealth Universities, Trustee of The Royal High School Bath and the Holburne Museum, Director and Chair of the Education, Heritage and Culture Sector Table with the Iraq Britain Business Council. She is life patron of the Society of Philosophy for the Young.

Christina has a PhD in philosophy of language and logic from The Australian National University, a Diploma of Education from the University of New England and qualifications in Spanish, French and Arabic. She has led major European Union funded research grants, worked with policy in Westminster and Brussels and published widely.

Christina has been President of the Royal Society of NSW since 2025.

Victor Dominello



The Honourable Victor Dominello is a globally recognised leader in public sector transformation and a pioneer of secure, citizen-focused digital identity. His achievements earned him a place on the Okta Identity 25 list of global visionaries, with his image featured on the Nasdaq Tower in New York’s Times Square. As NSW’s inaugural Minister for Customer Service and Digital, he spearheaded world-first initiatives including the fully digital driver’s licence, now adopted by over 85% of eligible citizens with a 93% satisfaction rating. Through ServiceGen, the advisory firm he co-founded, Victor advises the World Bank on national digital identity and verifiable credentials.

KEYNOTE SESSION

CHAIR

Sally Cripps FRSN



Sally Cripps is an internationally recognized scholar and leader in Bayesian Machine Learning (ML) and Artificial Intelligence (AI). She is Director of Technology at the Human Technology Institute and a Professor of Mathematics and Statistics at the UTS. Sally has held a number of leadership positions in ML and AI. She was co-

founder and co-director of the University of Sydney’s Centre for Translation Data Science, she was founder and director of the ARC-funded centre, Data Analytics for Resources and Environments (DARE). Most recently Sally was Research Director in CSIRO’s Data61.

Sally’s research focuses on the development of new methods in AI to address global challenges. She has applied these methods to a diverse range of fields including social disadvantage, mental health, and the environment. In recognition of her research Sally was awarded an ARC Future Fellowship and a Rutherford Fellowship at the Alan Turing Institute in the UK.

KEYNOTE SPEAKER

Pascal Van Hentenryck FAAAAI



Pascal Van Hentenryck is the director of the NSF Artificial Intelligence Institute for Advances in Optimization (AI4OPT), the director of Tech AI, the Artificial Intelligence Hub, and the A. Russell Chandler III Chair and Professor in Industrial and Systems Engineering at the Georgia Institute of Technology. He was a professor of computer science at Brown University for over 20 years and led the optimisation research group at the National ICT Research in Australia. His current research focuses on AI for Engineering with applications in energy systems, supply chains and manufacturing, health care, corporate systems, and mobility. Van Hentenryck is a pioneer of constraint programming, and he designed several innovative optimization systems that have been in commercial use for over 20 years. He is a Fellow of AAAI and INFORMS.



THE HOPE AND THE HYPE



PANEL SESSION 1 AI AND THE LAW

CHAIR

Rosalind Croucher
AM FRSN FAAL

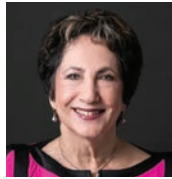


Rosalind Croucher AM FRSN FAAL has over 40 years' experience

in the legal academy and government roles. After serving as Dean of two Australian law schools, she led two federal government agencies, the Australian Law Reform Commission and the Australian Human Rights Commission. In 2007, she was made a Foundation Fellow of the Australian Academy of Law and in 2014 she was awarded the Australian Women Lawyers' award for her 'outstanding contribution to the legal profession' role in supporting and advancing women in the legal profession. In 2015, she was made a Member of the Order of Australia (AM) for 'significant service to the law as an academic, to legal reform and education, to professional development, and to the arts.' In 2018 and 2020 respectively, she was awarded honorary LLDs by UNSW and Macquarie University. In June 2025 Rosalind was appointed to lead the NSW Information and Privacy Commission as Information Commissioner and CEO.

PANELLIST

Annabelle Bennett
AC SC FAA FAAL



The Honourable Dr Annabelle Bennett AC SC FAA FAAL was a Judge of the

Federal Court of Australia, an additional Judge of the ACT Supreme Court, President of the Copyright Tribunal and Deputy President of the Administrative Appeals Tribunal. She is currently an Arbitrator of the Court of Arbitration for Sport, Chair, Reef 2050 Advisory Committee, Chair, Gardior Pty Limited (Trustee of the Infrastructure Fund), and Board Member including the Garvan Institute, Community Migrant Resource Centre, and Independent Parliamentary Expenses Authority. Also, member and past President of Chief Executive Women. Previous roles include Chancellor, Bond University and Chair, ANSTO Board; Commissioner, NSW Law Reform Commission and Royal Commissioner into National Natural Disaster Arrangements. She is a Fellow of the Australian Academy of Science and the Australian Academy of Law.

PANELLIST

Melissa Perry
FAAL



Justice Melissa Perry FAAL was appointed to the Federal Court of Australia in

2013 and serves as the Deputy President of the Defence Force Discipline Appeal Tribunal. Her Honour graduated in Law from Adelaide University with first class honours. Her PhD in public international law from the University of Cambridge was awarded the Yorke Prize. She practiced at the Bar in Australia from 1992 to 2013, being appointed Queen's Counsel in 2004 and was admitted to the Bar of England and Wales. Justice Perry serves with RAAF Legal Specialist Reserves holding the rank of Air Commodore and was appointed Deputy Judge Advocate General-Air Force in 2023. Among other roles, her Honour is a Foundation Fellow and former director of the Australian Academy of Law, and a member of the advisory boards for the Centre for International and Public Law (ANU), and the Gilbert + Tobin Centre of Public Law at UNSW.

PANELLIST

Lyria Bennett Moses
FRSN FASSA FAAL FASSA



Lyria Bennett Moses is a Professor and Head of the School of Law, Society, and

Criminology in the Faculty of Law and Justice at UNSW Sydney. Lyria's research explores issues around the relationship between technology and law, including the types of legal issues that arise as technology changes, how these issues are addressed in Australia and other jurisdictions, and the problems of treating "technology" as an object of regulation. Recently, she has been working on legal and policy issues associated with the use of artificial intelligence and the appropriate legal framework for enhancing cyber security. Lyria is a member of the editorial boards for Technology and Regulation; Law, Technology and Humans, the Journal of Cross-Disciplinary Research in Computational Law, and Law in Context. She is a Fellow of the Academy of the Social Sciences in Australia, the Australian Academy of Law, and the Royal Society of NSW.

PANEL SESSION 2 AI IN COMMUNITIES

CHAIR

Sally Cripps
FRSN



Sally Cripps FRSN is an internationally recognised scholar and leader in

bayesian Machine Learning (ML) and Artificial Intelligence (AI). She is Director of Technology at the Human Technology Institute and a Professor of Mathematics and Statistics at the UTS. Sally has held a number of leadership positions in ML and AI. She was co-founder and co-director of the University of Sydney's Centre for Translation Data Science, she was founder and director of the ARC-funded centre, Data Analytics for Resources and Environments (DARE). Most recently Sally was Research Director in CSIRO's Data61.

Sally's research focuses on the development of new methods in AI to address global challenges. She has applied these methods to a diverse range of fields including social disadvantage, mental health, and the environment. In recognition of her research Sally was awarded an ARC Future Fellowship and a Rutherford Fellowship at the Alan Turing Institute in the UK.

PANELLIST

Jill Bennett



Jill Bennett is Scientia Professor and Australian Research Council

Laureate Fellow at UNSW where she directs the Big Anxiety Research Centre (BARC). She has a background in creative media, trauma and psychosocial studies. Her work focuses on the development of Virtual Reality [VR], AI and other media tools for community mental health and wellbeing. She is currently working with remote and regional Aboriginal communities on co-design of VR for Transforming Trauma (funded by MRFF).

She also leads a research program developing AI companions with the skills to provide psychosocial support, working with diverse users including older people and people living with dementia. Her team has pioneered the use of "lived experience" data to drive AI modules, enhancing the capacity and safety of AI companions. The "skilled AI companions" are currently being trialled in aged-care.

PANELLIST

Stephen Hardy



Stephen Hardy has 25 years of experience building and deploying AI and machine

learning systems across financial services, government, retail, and consumer electronics sectors. He is co-inventor of 15 US patents and author of 15+ publications.

PANELLIST

Dan Hart



Dan Hart works on the practical application of AI, with a focus on

systems that are deployed at scale and used in daily operations. His work spans conversational AI, search, and personalised learning, with an emphasis on measurable outcomes and safe use. He bridges technical implementation with organisational needs, helping teams adopt AI effectively and safely.

PANELLIST

Jacky Hodges
GAICD



Jacky Hodges GAICD is the Chief Data Officer and co-Chief AI Officer

at the NSW Department of Education, leading the Data and Analytics pillar of the Centre for Education Statistics and Evaluation (CESE) directorate. She also serves on ACARA's Reference and Advisory Group for National Assessment, Data, Analysis and Reporting and Centre for Educational Measurement and Assessment (CEMA) Advisory Committee. Prior to the Department, Jacky spent over a decade at the Australian Bureau of Statistics, where she held various leadership roles including Chief Risk and Chief Audit Executive Officer, General Manager for Enterprise Strategy & Communications, and General Manager for Industry Statistics, and Statistical Business Transformation. She also worked closely with various State and Territory Governments in her official roles of WA and Tasmanian Statistician. Equipped with studies in organisational behaviour, strategic human resource management, a Graduate Certificate in Statistics, and a Bachelor of Applied Science, she possesses a diverse and unique range of expertise.



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THE HOPE AND THE HYPE



PANEL SESSION 3 AI IN HEALTH

CHAIR

Michael Blumenstein FRSN FACS



Michael Blumenstein is currently a Professor and the Pro Vice Chancellor

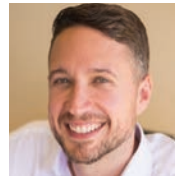
(Business Creation and Major Facilities) at the University of Technology Sydney. Over two decades, Michael has successfully led the growth of cutting-edge research at universities, particularly in collaboration with industry and focusing on translational outcomes.

Michael is a nationally and internationally recognised expert in the areas of automated pattern recognition and artificial intelligence. He is passionate about developing technology that has a positive effect on society, focusing on AI for good. Michael has published his work widely, particularly AI applications with multi-disciplinary teams for solving global problems. Among the many projects he has led in collaboration with industry, Michael's team developed the award-winning SharkSpotter — a world-first AI-based technology for detecting sharks in the ocean from uncrewed aerial vehicles (UAVs) to enhance beach safety and for saving lives.

Michael is a Fellow of the Australian Computer Society and a Fellow of the Royal Society of NSW.

PANELLIST

Sean Baldwin



Sean Baldwin is Deputy Chief Medical Information Officer for Northern

Sydney Local Health District (NSLHD), and an Emergency Specialist at Royal North Shore Hospital and Bowral and District Hospitals. With a prior five-year career in IT and a Bachelor of Science in Information Technology, he brings a unique blend of clinical expertise and digital innovation to healthcare. Dr Baldwin leads key digital health initiatives including the Decision Support Specialty Content Group for the Single Digital Patient Record, the AI Community of Practice, and sits on the AI governance committee. He also sits on many application advisory groups for the current electronic medical record. He is combining quality improvement in digital health with clinical research by running a procedural sedation project in NSLHD, and is passionate about getting rid of fax machines that run the healthcare system. In his spare time, he is usually being climbed on by his two little girls.

PANELLIST

Simon Carlile



Simon Carlile is a senior executive, strategist, entrepreneur and researcher

with a depth of experience as Vice President for Research (Starkey Hearing Technologies), Chief Information Officer (University of Sydney), CTO and CEO of two startup companies and Professor of Neuroscience (Faculty of Medicine, University of Sydney). Focused on translating cutting edge technology for delivering on human needs and building innovative and sustainable solutions. Now working with Google Research (Australia) and best in class research colleagues in the Sydney Basin and beyond.

PANELLIST

Richard Taggart



Richard Taggart is a transformative digital health leader with over 20 years

of ICT experience, combining a clinical background in pharmacy with a proven track record across both public and private healthcare organisations. Richard started his role on 20 January 2025. He was previously National Director of Digital Health at Calvary Health Care. He has also served as the Chief Information Officer for Sydney Local Health District (2019 – 2023), leading the Digital Health and Innovation team and overseeing major initiatives including the NSW Health Vaccination Centre systems and the RPA Virtual Hospital.

PANELLIST

Amandeep Hansra FRACGP FACHI ACCAM



Dr Amandeep Hansra is a leader in digital health and innovation in

Australia. She is a general practitioner with 18 years' clinical experience, but is also known for her work as a digital health consultant, entrepreneur and investor. She has been a Digital Health Adviser with the Australian Digital Health Agency for five years and in July 2024 became the Agency's Chief Clinical Adviser (Medicine).

Amandeep was the CEO and Medical Director of Telstra's telemedicine business ReadyCare, a joint venture between Telstra and Medgate, (Switzerland's leading telemedicine provider). She also served as the Chief Medical Officer for Telstra Health and separately was involved in setting up a telemedicine business in the Philippines. Amandeep was the inaugural Program Director for the Australian Clinical Entrepreneur Program (AUSCEP). She has held senior leadership roles at Medibank, nib and the Department of Home Affairs.

PANEL SESSION 4 AI IN PRACTICE

CHAIR

Mary-Anne Williams FTSE FACS FAAA



Mary-Anne Williams is Chair of the Australian Academy of Technological

Sciences and Engineering (ATSE) Digital Futures Forum and a research leader in artificial intelligence, human-AI collaboration and innovation, with a career spanning leading universities, government advisory, and global industry partnerships. She is the Michael J. Crouch Chair for Innovation at the University of New South Wales, where she founded and directs the UNSW Business AI Lab. Previously, she established the Magic Lab at UTS, translating AI research into real-world solutions and leading her Social Robotics research team to win the RoboCup World Championship and the Human-Robot Interface Award.

Mary-Anne is a Fellow at Stanford University and a Fellow of the Association for the Advancement of Artificial Intelligence (AAAI), the peak international AI body. She has delivered hundreds of keynote addresses, including at the United Nations AI Summit and the ACM/IEEE International Conference on Human-Robot Interaction, and advised leading organisations worldwide on AI strategy and innovation. Her work has earned her the Australasian AI Distinguished Research Contribution Award, Google Faculty Machine Learning Awards, and an IBM Faculty Award.

PANELLIST

Ros Harvey



Ros Harvey is a technologist, innovator and serial entrepreneur. In

2024, she founded The Yield — an early innovator using AI to improve profitability and sustainability in agriculture. The Yield was acquired by Yamaha Agriculture in 2024, with Ros serving as a Special Advisor to this business.

Ros also co-founded the Food Agility Co-Operative Research Centre. In 2024 she was awarded the Cooperative Research Australia Life Time Achievement Award for Contribution to Industry-Research Collaboration. In 2018, she was recognised as Australia's Emerging Female Technology Leader by Women's Agenda and as one of the Australian Financial Reviews 100 Most Influential Women.

Ros is also President of Australia's leading national environmental organisation, the Australian Conservation Foundation (ACF).

Ros has held senior leadership roles across the public, private, research and international sectors, including with the United Nations. She has held senior leadership roles across the public, private, research and international sectors, including with the United Nations.

PANELLIST

Dan Jermyn



Dan Jermyn is an experienced leader in both technology and

analytics, with an established record of building award-winning, global teams in digital, big data and customer decisioning. Dan joined the Commonwealth Bank of Australia in 2017, where he has responsibility for ensuring they harness specialisms in AI, data science, experimentation, and behavioural economics to drive decisions that help improve the financial wellbeing of CBA's customers and communities.

After gaining master's degrees from both Oxford University and Cardiff University, Dan first plied his trade as a strategy consultant and then Head of Analytics for an agency in the UK, where he led engagements with a host of major corporate and governmental organisations. He followed this up by co-founding a successful digital technology start-up. Dan joined CBA from the Royal Bank of Scotland, where he held various roles including Head of Digital Analytics and Head of Big Data & Innovation.

PANELLIST

Salah Sukkarieh FTSE FIEEE



Salah Sukkarieh is a global leader in robotics and autonomous systems. His

research focuses on intelligent robotic platforms for unstructured environments, with applications in agriculture, aerospace, environmental monitoring, and humanitarian engineering. He is a Fellow of the IEEE and ATSE and has received multiple national and international awards for his contributions to robotics research and translation.

At the University of Sydney, he has led large-scale, industry-funded projects, authored over 500 academic and industry publications, and served as Director of Research and Innovation at the Australian Centre for Field Robotics. He was also CEO of Agerris, a company translating university research into field-ready agricultural robotics.

His work integrates machine learning, autonomy, and digital-physical systems to address societal and industry challenges, and he has secured over \$70 million in collaborative research funding across mining, logistics, aviation, agriculture, and disaster response sectors.



THE HOPE AND THE HYPE



PANEL SESSION 5 AI RESEARCH – FUTURE DIRECTIONS

CHAIR

Hugh Durrant-Whyte
FRS FREng FAA FIEEE
HonFIEAust



Hugh Durrant-Whyte is the NSW Chief Scientist and Engineer.

Hugh is an Honorary Fellow of Engineers Australia (HonFIEAust), a Fellow of the IEEE (FIEEE), of the Australian Academy of Science (FAA), of the Royal Academy of Engineering (FREng), and of the Royal Society of London (FRS).

PANELLIST

Toby Walsh
FRSN FTSE FAA FACM
FAAAS FAAAAI



Toby Walsh is an ARC Laureate Fellow and Scientia Professor of AI at UNSW

Sydney. He is the Chief Scientist of UNSW.AI, UNSW’s campus wide AI Institute. He is a strong advocate for limits to ensure AI is used to improve our lives, having spoken at the UN, and to heads of state, parliamentary bodies, company boards and many others on this topic. This advocacy has led to him being “banned indefinitely” from Russia. He is a Fellow of the Australia Academy of Science, and was named on the international “Who’s Who in AI” list of influencers. He has written five books on AI for a general audience, the most recent is “The Shortest History of AI: six ideas are all you need to know”.

PANELLIST

Pascal Van Hentenryck
FAAAI



Pascal Van Hentenryck FAAAAI is the director of the NSF Artificial Intelligence

Institute for Advances in Optimization (AI4OPT), the director of Tech AI, the Artificial Intelligence Hub, and the A. Russell Chandler III Chair and Professor in Industrial and Systems Engineering at the Georgia Institute of Technology.

He was a professor of computer science at Brown University for over 20 years and led the optimisation research group at the National ICT Research in Australia. His current research focuses on AI for Engineering with applications in energy systems, supply chains and manufacturing, health care, corporate systems, and mobility. Van Hentenryck is a pioneer of constraint programming, and he designed several innovative optimization systems that have been in commercial use for over 20 years. He is a Fellow of AAAI and INFORMS.

PANELLIST

Jie Lu
AO FIEEE FIFSA FACS



Jie Lu is a world-renowned scientist in the field of computational

intelligence, primarily known for her work in fuzzy transfer learning, concept drift, recommender systems, and decision support systems. She is an IEEE Fellow, IFSA Fellow, Australian Computer Society Fellow, Australian Laureate Fellow and Australian Industry Laureate Fellow.

Professor Lu is the Director of the Australian Artificial Intelligence Institute (AAIL) at the University of Technology Sydney, Australia. She has published six research books and over 500 papers in leading journals and conferences, won 10 Australian Research Council (ARC) Discovery Projects and over 20 industry projects as leading chief investigator; and has supervised over 50 PhD students to completion. She serves as Editor-In-Chief for Knowledge-Based Systems. She is the recipient of NeurIPS Outstanding Paper Award, two IEEE Transactions on Fuzzy Systems Outstanding Paper Awards, Australasian AI Distinguished Research Contribution Award, Australian NSW Premier’s Prize and the Officer of the Order of Australia (AO).

PANELLIST

Lina Yao



Lina Yao is a Senior Principal Research Scientist and Science Lead for

Translational Machine Learning at CSIRO’s Data61. Her research spans machine learning, data mining, information retrieval, recommender systems, and natural language processing, with a particular focus on developing robust ML systems and intelligent AI agents. She is deeply interested in explainable and personalised AI, as well as human-AI cooperation, aiming to create steerable, user-centric, and impactful systems. Professor Yao is also passionate about applying AI for science and social good, leveraging cutting-edge methodologies to tackle real-world challenges and deliver meaningful societal benefits.

WITH GRATITUDE

The Royal Society of NSW expresses its gratitude to all members of the 2025 Forum Planning Committee.

FORUM CHAIR
Emeritus Professor Christina Slade
FRSN FRSA
President, Royal Society of NSW

CHAIR

Christina Slade
FRSA FRSN



Christina Slade has served as a senior academic and administrator in

Australia, Europe, the US and Mexico. She was Vice-Chancellor and Chief Executive of Bath Spa University, the Dean of Arts and Social Sciences at the City University London and Macquarie University’s Dean of Humanities. She was Professor of Media Theory with the University of Utrecht and interim Rector of Charles Sturt University. Professor Slade serves on the UK based Board of QS rankings and the National Art School in NSW. While based in the UK she was Chair of University of Gibraltar’s Academic Board, Trustee and Chair of the Audit and Risk Committee of the Association of Commonwealth Universities, Trustee of The Royal High School Bath and the Holburne Museum, Director and Chair of the Education, Heritage and Culture Sector Table with the Iraq Britain Business Council. She is life patron of the Society of Philosophy for the Young.

Christina has a PhD in philosophy of language and logic from The Australian National University, a Diploma of Education from the University of New England and qualifications in Spanish, French and Arabic. She has led major European Union funded research grants, worked with policy in Westminster and Brussels and published widely.

FORUM PROGRAM CHAIR
Professor Sally Cripps
FRSN

FORUM SECRETARY
Dr Elizabeth Deane FRSN

COMMITTEE MEMBERS
Emeritus Professor Lindsay Botten
FRSN FOSA FAIP FAustMS
Vice-President, Royal Society of NSW

Mr Vince Di Pietro AM CSC FRSN

Emeritus Professor Graham Town
FRSN SMIEE HonFIEAust

PROGRAM CHAIR

Sally Cripps
FRSN



Sally Cripps is an internationally recognised scholar and leader in Bayesian

Machine Learning (ML) and Artificial Intelligence (AI). She is Director of Technology at the Human Technology Institute and a Professor of Mathematics and Statistics at the UTS. Sally has held a number of leadership positions in ML and AI. She was co-founder and co-director of the University of Sydney’s Centre for Translation Data Science, she was founder and director of the ARC-funded centre, Data Analytics for Resources and Environments (DARE). Most recently Sally was Research Director in CSIRO’s Data61.

Sally’s research focuses on the development of new methods in AI to address global challenges. She has applied these methods to a diverse range of fields including social disadvantage, mental health, and the environment. In recognition of her research Sally was awarded an ARC Future Fellowship and a Rutherford Fellowship at the Alan Turing Institute in the UK.

SECRETARY

Elizabeth Deane
FRSN



Elizabeth Deane has had over 30 years’ experience in the higher education

sector. Her experience spans roles in teaching, research and senior management positions including Foundation Head of a department; Head of School; Dean of Faculty and Pro-Vice Chancellor Education and Students. Elizabeth holds a PhD from the University of Sydney and was until her progression into senior management, an active, funded researcher and postgraduate student supervisor in the area of developmental immunology and disease. Since retiring in 2015 Elizabeth has continued her active engagement with the sector. She has undertaken a number of institutional reviews addressing such diverse areas as students support services; governance and IT provision as well as reviews for new applicant higher education private providers. She continues to be an international reviewer for higher education quality assurance agencies. Elizabeth is actively engaged in supporting higher education private providers and is a member or chair of a number of academic and governance boards of existing and aspiring providers.



AI

THE HOPE AND THE HYPE

COMMITTEE MEMBER

Lindsay Botten

FRSN FOSA FAIP FAustMS



Lindsay Botten an Emeritus Professor at the Australian National

University (ANU) and the University of Technology Sydney (UTS), and presently serves on the Council of the Royal Society of NSW (RSNSW) and as its Webmaster. He was the foundation Director of National Computational Infrastructure (NCI) at ANU (2008- 17) where he led the development of the Australia's highest performance and most highly integrated research supercomputing and data service, positioning NCI at the vanguard of international advanced computing.

Previously, he was Professor of Applied Mathematics at UTS, where he established a reputation as an international authority in theoretical optics and photonics and led the computational modelling team of the ARC Centre of Excellence, CUDOS. He is active as a consultant in high-performance computing nationally, and in RSNSW where he leads the development of its information technology, audio-visual, and social media modernisation. He is a Fellow of the Optical

Society of America, the Australian Institute of Physics, the Australian Mathematical Society, and the Royal Society of NSW.

Lindsay has been Vice-President of the Royal Society of New South Wales since 2025.

COMMITTEE MEMBER

Vince Di Pietro

AM CSC FRSN



Vince Di Pietro is an independent consultant. Vince draws on 40 years

of service in the Royal Australian Navy specialising in aviation, flight training, military education, international diplomacy, risk management, certification, and safety. In addition to Command appointments, Vince served twice as a Director General, as a Naval Attache to the United States, and as Commander of the Fleet Air Arm. On his retirement, Vince was appointed Chief Executive of Lockheed Martin Australia and New Zealand until retiring in 2019. During and after the Currowan Bushfire, Vince was the Local Recovery Coordinator for the Shoalhaven City Council overseeing the recovery coordination of the damage sustained by 82% of the Shoalhaven's 4600 square kilometers. Having learned

much during the fire emergency, Vince designed, coordinated, and implemented the Recovery into Resilience Project in the Shoalhaven. The Project was delivered on time and budget in October 2023 and is now fully operational at 26 Community Information Hubs powered by solar and battery and connected via satellite internet.

COMMITTEE MEMBER

Graham Town

FRSN CPEng SMIEEE HonFIEAust



Graham Town is an electrical engineer with 8 years experience in the

Australian electronics industry (AWA Pty. Ltd.), and a distinguished track record of over 30 years contributing to Australian engineering education and research. His primary professional achievements were establishment of Macquarie University's Bachelor of Engineering program, influential contributions to engineering education in Australia, and leadership of many competitively funded and industry sponsored research projects across diverse areas, including biomedical engineering, guided-wave optics and photonics, engineering education, waste-to-energy conversion, power

electronics, and transport electrification.

Graham is an Emeritus Professor at Macquarie University, a Chartered Professional Engineer (Telecommunications, Electrical, Leadership), a Senior Member of the IEEE, an Honorary Fellow of the Institution of Engineers Australia, and a Fellow of the Royal Society of NSW.

Graham has been a RSNSW Council Member and Assistant Webmaster since 2025.



Royal Society of New South Wales event information



Registration & tickets



Australian Academy of Health and Medical Sciences



Australian Academy of Technological Sciences & Engineering 1975-2025



The Forum is held under the auspices of Her Excellency the Honourable Margaret Beazley AC KC, Governor of New South Wales. The Royal Society of New South Wales acknowledges the generous support of Her Excellency and the Office of the NSW Chief Scientist and Engineer.