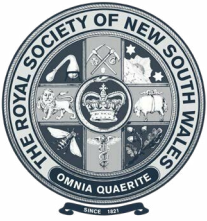


The Royal Society of NSW and Learned Academies Forum

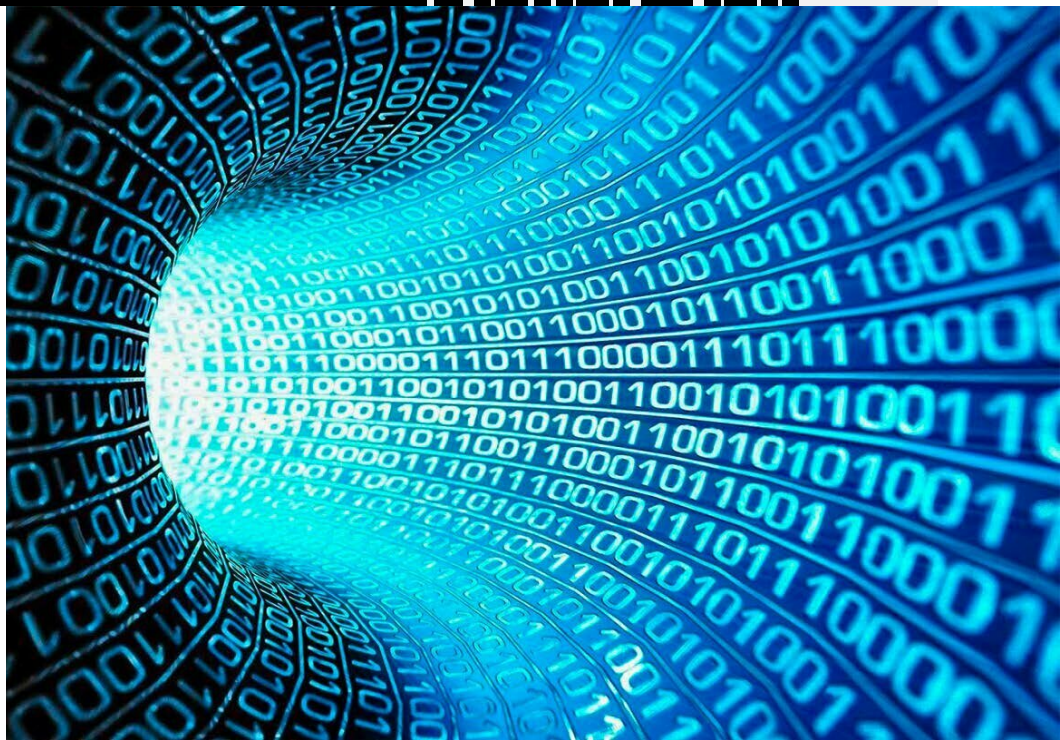
Power & Peril of the digital age



Australian
Academy of Health and
Medical Sciences



The Royal Society of NSW acknowledges the generous support of Her Excellency the Honourable Margaret Beazley AC QC, Governor of New South Wales, the Office of the NSW Chief Scientist and Engineer, and the NSW Smart Sensing Network



Virtual Conference

4 + 5 November 2021
9.00am-12.30pm

A child is born 04.11.21

That child enters a complex digital world that brings both power and peril.

Join us as we explore how technology, health, security and industry in a digital age will impact our child's journey as he/she approaches 2030, 2050 and beyond.



Power & Peril of the digital age

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We are at a moment in time when we must acknowledge and address the inexorably rising tide of data use and digital services. History will categorise the early decades of the 21st Century as the digital age, the age of prodigious development and use of digital technologies that enable us to transfer and access information easily and swiftly.

So much so that digital interaction is a defining characteristic of modern human life. Societies, economies, and political processes are infused and connected by the ubiquitous use of smart machines and software that process and communicate information to us in ways that would have been unimaginable just a few years ago. The pace of digitalisation was already fast by the end of 2019 before the COVID-19 emerged.

The pandemic broke through cultural barriers and enabled implementation of digital strategies in matter of days or weeks rather than years. Digital technologies and supercomputer simulation are central to dealing with the pandemic itself as well as being the primary driver of productivity in almost every other aspect of society.

Companies, governments and organisations across the world are increasingly taking advantage of the benefits associated with data analytics and simulation, artificial intelligence, and the Internet of Things to solve problems never solved before, to undertake projects in five days that would have taken five years.

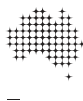
Problems such as those embodied in the United Nations General Assembly's Sustainable Development Goals and their achievement by 2030. Tangible benefits include greater social connectivity, learning opportunities, information access and usage, versatile working and transport, greater access to entertainment, and new forms of banking and finance.

Unlocking the power of the digital age also brings peril associated with concerns about data security, state based and transnational crime and terrorism, complexity, privacy, social disconnection, media manipulation, distortion of the truth, communities left behind, national defence and market vulnerabilities, and outstripping rule making and regulatory structures.

This year, the Royal Society of NSW in partnership with Australia's Learned Academies — Health and Medicine, Humanities, Science, Social Sciences, and Technology and Engineering — has chosen Power and Peril of the Digital Age as the theme for our annual Forum. Our goal is to have a grown-up conversation about digitalisation and the use of data. It will be framed around the future life of a child born on the day of the Forum, 04 November 2021. This child will be born into a world of increasingly complex digital systems that hold great value and vulnerability.

Starting with a technological framing, the Forum will explore several major aspects which will impact the journey of that child as we approach 2030 and beyond. We will explore aspects of technology, health, defence and security in a digital age, and the changing nature of industry as the world and society evolves.

Finally, our annual Forum will be a call to arms for the host Societies to focus on challenges identified during the two days that must be addressed for Australia to remain a prosperous, successful, and safe democracy in the digital world.



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
Technology & Engineering



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4 November 2021

9.00am-12.30pm



| | TIME | SUBJECT | SPEAKERS |
|-------|---------------|--|---|
| DAY 1 | 09:00 – 09:20 | Welcome and Acknowledgment of Country | Susan Pond AM FRSN FTSE FAHMS President, Royal Society of NSW |
| | | Official Opening | Her Excellency the Honourable Margaret Beazley AC QC Governor of New South Wales |
| | | Introduction to the Moderator and Rapporteur | Susan Pond AM FRSN FTSE FAHMS President, Royal Society of NSW |
| | | Moderator and Rapporteur | Ian Oppermann FRSN FTSE Chief Data Scientist, NSW Government; Industry Professor, University of Technology Sydney |
| 1.1 | 09:20 - 10:00 | Science and Technology Underpinning the Digital Age: Past, Present and Future | Cathy Foley AO PSM FRSN FAA FTSE Australia's Chief Scientist Hugh Durrant-Whyte FRS FREng FAA NSW Chief Scientist & Engineer |
| 1.2 | 10.00-10.30 | Digital Lifetime of a Child Born Today | Frances Foster Thorpe Executive Director — Shaping Futures, NSW Department of Premier and Cabinet Sue Bennett Professor, Deputy Director and Connected Child Co-Leader, ARC Centre of Excellence for the Digital Child, University of Wollongong |
| — | 10:30 - 10:40 | MORNING TEA ~ 10 minutes | |
| 1.3 | 10:40 - 11:10 | Avoiding a Digital Dark Age | Shawn Ross Director, Digitally-Enabled Research, Office of the Deputy Vice-Chancellor; Professor of History and Archaeology, Macquarie University Theresa Anderson Social Informaticist, Connecting Stones Consulting; Research Fellow, School of Information Sciences, University of Illinois at Urbana-Champaign |
| 1.4 | 11.10-11.40 | Health of our Digital Child | Zoran Bolevich Chief Executive, eHealth NSW and Chief Information Officer, NSW Health, NSW Government Louisa Jorm FAHMS Professor, Faculty of Medicine and Foundation Director, Centre for Big Data Research in Health, UNSW Sydney |
| 1.5 | 11:40 - 12:20 | Safety and Security of our Digital Child | Dale Lambert PSM Chief of Cyber and Electronic Warfare Division, Defence Science and Technology Group, Australian Department of Defence Rory Medcalf Professor and Head, National Security College, Crawford School of Public Policy, Australian National University |
| 1.6 | 12:20-12:30 | Set-up for Day 2 including Challenges | Ian Oppermann FRSN FTSE Chief Data Scientist, NSW Government; Industry Professor, University of Technology Sydney |

+ + + Conference continues tomorrow 9.00am-12.30pm

5 November 2021

9.00am-12.30pm



| | TIME | SUBJECT | SPEAKERS |
|-------|---------------|---|--|
| DAY 2 | 09:00 – 09:20 | Welcome and Acknowledgment of Country | Susan Pond AM FRSN FTSE FAHMS President, Royal Society of NSW |
| | | Recap of Day 1 | Moderator and Rapporteur — Ian Oppermann FRSN FTSE Chief Data Scientist, NSW Government; Industry Professor, University of Technology Sydney |
| 2.1 | 09:20 - 10:20 | The Light and Shade of Technology on our Digital Child | Edward Santow Industry Professor — Responsible Technology, University of Technology Sydney (UTS); (Immediate Past) Australian Human Rights Commissioner The Honourable Verity Firth Executive Director, Centre for Social Justice and Inclusion, University of Technology Sydney Marc Fennell Journalist, Interviewer and Maker of Things Aengus Tran Founder and Chief Executive Officer, Harrison.ai |
| — | 10:20 - 10:30 | MORNING TEA ~ 10 minutes | |
| 2.2 | 10.30 - 10.40 | Address by NSW Government Minister | The Honourable Victor Dominello MP Minister for Digital and Minister for Customer Service; Member for Ryde |
| 2.3 | 10:40 - 11:30 | Securing the Future of our Digital Child | Robert Hillard Managing Partner, Deloitte Consulting Asia Pacific Angie Abdilla Founder and Chief Executive Officer, Old Ways, New Australia; Professor of Practice, Faculty of Art, Architecture and Design, UNSW Sydney Toby Walsh FAA Laureate Fellow and Scientia Professor of Artificial Intelligence, UNSW Sydney David Pryor Senior Team Leader, Energy Security Safeguard, Department of Planning, Industry and Environment, NSW Government |
| 2.4 | 11.30-12.10 | Future Australia — the Role of Learned Academies | Tony Cunningham AO FAHMS Australian Academy of Health and Medical Sciences Richard Waterhouse FRSN FAHA FASSA Australian Academy of the Humanities Toby Walsh FAA Australian Academy of Sciences Deborah Lupton FASSA Academy of Social Sciences in Australia Annabelle Duncan PSM FRSN FTSE Australian Academy of Technology and Engineering |
| 2.5 | 12.10 - 12:30 | Wrap-up and Close | Moderator and Rapporteur — Ian Oppermann FRSN FTSE Chief Data Scientist, NSW Government; Industry Professor, University of Technology Sydney |

The Royal Society of NSW and Learned Academies Forum



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HOW TO REGISTER

Via the Royal Society of NSW [website](#)
Scan the QR code below or [click here](#).

RECORDING

All sessions from will be recorded and made available after the conference.

Scan to register



royalsoc.org.au



THANK YOU

The RSNSW expresses its gratitude to all members of the 2021 Annual Forum Planning & Program Committees

Susan Pond AM FRSN FTSE FAHMS

Chair, Planning and Program Committee

Lindsay Botten FRSN

Virtual Production, Planning Committee

Anne Castles FASSA

Program Committee

Tony Cunningham AO FAHMS

Program Committee

Annabelle Duncan PSM FRSN FTSE

Program Committee

Robin King FRSN FTSE

Secretary, Planning Committee

Toby Walsh FAA

Program Committee

Richard Waterhouse FRSN FASSA FAHA

Program Committee



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 Technology & Engineering



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