arc training
centre for
**information
resilience**

INFORMATION RESILIENCE SYMPOSIUM 2023 | **PROGRAM**

Building Capacity for Enterprise AI with Information Resilience

The Long Room, Customs House, 399 Queen Street, Brisbane City

Wednesday 4th October 2023, 12pm – 6pm

12pm-12:30pm	**Arrival and light refreshments**	The Long Room, Customs House
12:30pm-12:40pm	**Welcome**	Associate Professor Gianluca Demartini, UQ
12:40pm-1:00pm	**Opening Address** **Building Capacity for Enterprise AI with Information Resilience**	Professor Shazia Sadiq, UQ
1:00pm-1:30pm	**Keynote: AI in the Enterprise: Yesterday, Today, and Tomorrow** *Coming, ready or not!*	Dr Peter Bailey, Canva
1:30pm-2:15pm	**Panel Discussion** **Enterprise AI Skills and Infrastructure**	Moderator: Dr Alina Bialkowski, UQ Panel Members: Professor Shane Culpepper (UQ), Dr Susie Kluth (Australian Department of Education), Associate Professor Hassan Khosravi (UQ)
2:15pm-2:45pm	**Afternoon Tea and Poster Viewing Session**	CIRES Postdoctoral Research Fellows Dr Hui Yin (Swinburne), Dr Junliang Yu, Dr Lei Han, and Dr Javad Pool (UQ)
2:45pm-3:30pm	**Panel Discussion** **Trust in AI and Adoption in the Enterprise**	Moderator: Mr James Mabbott (KPMG) Panel Members: Professor Tim Miller, Dr Caitlin Curtis, Associate Professor Nic Carah (UQ)
3:30pm-5:00pm	**Interactive Session**	Dr Ivano Bongiovanni (UQ)
5:00pm	**Close**	
5:00pm-6:00pm	**Networking drinks**	The River Terrace, Customs House

WELCOME & SYMPOSIUM CHAIR

ASSOC PROFESSOR GIANLUCA DEMARTINI

Gianluca Demartini is an Associate Professor in Data Science at The University of Queensland, and Chief Investigator and Theme Leader with the ARC Training Centre for Information Resilience (CIRES). His main research interests include Information Retrieval, Semantic Web, and Human Computation. His research is currently funded by the Australian Research Council, Facebook, and Google.

OPENING ADDRESS

PROFESSOR SHAZIA SADIQ

Shazia Sadiq is the Director of CIRES, and a research and education leader in data science at The University of Queensland. Her research track record has focused on overcoming challenges that stem from disparate IT systems and result in information silos, and she has developed new methods that to tackle these challenges through integrated solutions for information quality and effective use. Shazia is passionate about the positive impact emerging technologies from data science, machine learning and artificial intelligence can have on our future. She advocates for the responsible and ethical technology developments and believe strongly that these developments require trans-disciplinary collaborations between research, industry, government and community.

KEYNOTE TALK

DR PETER BAILEY

AI in the Enterprise: Yesterday, Today, and Tomorrow. Coming, ready or not!

Artificial intelligence will undoubtedly play a central role in future business operations. However, responsible, ethical, productive, and effective deployment of these powerful tools is paramount. This talk explores key considerations for organisations when deploying AI, including privacy, governance, and the decision to buy, build, or wait. What will it take to adapt in the era of AI?

Peter Bailey leads Machine Learning for Search and Recommendations at Canva. He has worked in a range of organisations, from academia to industrial research labs, from startups and consulting to Microsoft. He is a co-author of numerous scientific papers and co-inventor of a number of patents, and co-creator of several widely used datasets, including WT10g, CERC, UQV100, and CRD3. While at Microsoft, he was the development manager for the Contextual Relevance team (2009-2012) when it introduced personalised search ranking to the Bing web search engine. Elements of that work were recognised in the ACM SIGIR 2022 Test of Time paper award for "Modeling the impact of short- and long-term behavior on search personalization". In addition to his applied scientist and manager roles and responsibilities, he was a member of its Responsible AI Aether Committee's Fairness and Inclusiveness working group from 2018 through 2021. He is a Senior Member of the Association for Computing Machinery (ACM) and contributes regularly to program committees for conferences in the information retrieval community.

PANEL DISCUSSION: ENTERPRISE AI SKILLS AND INFRASTRUCTURE

In this panel we will discuss the key challenges for AI in enterprises including AI skills shortage and as well challenges to access to the large-scale computational infrastructures required to run AI solutions. This includes building an organisational culture which is AI-centred, making sure the right human resources are available within the organisation, and understanding the right cost/benefit trade-off related to access to skills, data, and compute.

DR ALINA BIALKOWKSI
Moderator

Alina Bialkowski is a computer vision and machine learning researcher developing interpretable machine learning models to increase the performance and transparency of Artificial Intelligence (AI) decision-making. Her research interests include quantifying and extracting actionable knowledge from data to solve real-world problems and giving human understanding to AI models through feature visualisation and attribution methods. She has applied these techniques to various multi-disciplinary applications such as medical imaging (including imaging strokes in the brain using the new sensing modality of electromagnetic imaging), modelling human attention in driving, intelligent transport systems (ITS), intelligent surveillance, and sports analytics. Alina is a Lecturer in Computer Science at The University of Queensland.

PROFESSOR SHANE CULPEPPER
Panel Member

Shane Culpepper is Professor of Artificial Intelligence at The University of Queensland. Before joining UQ in 2023, he held a continuing academic position at RMIT University in Melbourne. His research focuses primarily on building better Search and Recommendation Systems. Over his 16-year career, Professor Culpepper has supervised 19 PhD students and co-authored more than 120 peer reviewed papers with 127 different research collaborators on problems such as algorithm efficiency and scalability, new machine learning algorithms for search and recommendation systems, and evaluating search and recommendation engine quality. He was the founding director of the Centre for Information Discovery and Data Analytics at RMIT University.

DR SUSIE KLUTH
Panel Member

Susie Kluth is the Assistant Secretary of the Analysis, Data and Measurement Branch at the Department of Education and the department's Chief Data Officer, leading the delivery of the department's Data Strategy. She is committed to building data capability in organisations and individuals and contributes to the whole of government data agenda as a member of the MADIP board and the senior working group for the Australian Public Service's Data Profession. She has 17 years of experience in data and analysis from a broad range of data roles building on her early career as a physicist and engineer. Susie is also a member of the CIRES Strategy Board.

ASSOCIATE PROFESSOR HASSAN KHOSRAVI
Panel Member

Hassan Khosravi is an Associate Professor and Senior Lecturer in Data Science and Learning Analytics at The University of Queensland, and Chief Investigator and Theme Leader with CIRES. As a computer scientist by training, he is passionate about the role of artificial intelligence in the future of education. In his research, he draws on theoretical insights from learning science and exemplary techniques from the fields of human-computer interaction, learning analytics and explainable AI to design, implement, validate and deliver technological solutions that contribute to the delivery of learner-centred, data-driven learning at scale. His past research and publications have addressed a number of diverse topics such as learning graphical models, statistical-relational learning, social network analysis, cybersecurity and game theory.

PANEL DISCUSSION: TRUST IN AI AND ADOPTION IN THE ENTERPRISE

In this panel we will discuss the key obstacles to trust in AI and to adoption of AI in an enterprise setting. This includes aspects of explainable and transparent AI that can lead to reliable AI systems as well as to the changing regulatory frameworks around AI and their inconsistencies around the globe.

MR JAMES MABBOTT
Moderator

James Mabbott is partner in charge for KPMG Futures and National Leader KPMG Innovate. James and his team work at the intersection of signals of change across society, technology, economics and politics to identify and understand emerging trends and their potential to reshape and reimagine our world. This is done by working at the CEO and Board level to identify opportunities for innovation and disruption to explore new business model hypotheses that drive profitable business growth with the aim of creating sustainable value for all stakeholders. He has worked across a range of public and private clients in the Financial Services, Telecommunications, Technology, Energy and Natural Resources, and Government sectors. James is also a member of the CIRES Strategy Board.

PROFESSOR TIM MILLER
Panel Member

Tim Miller is a Professor in the School of Electrical Engineering and Computer Science at The University of Queensland. His research is at the intersection of artificial intelligence, interaction design, and cognitive science/psychology. His areas of education expertise are in artificial intelligence, software engineering, and technology innovation. His primary area of expertise is in artificial intelligence, with particular emphasis on Human-AI interaction, AI-assisted decision support, Explainable AI (XAI), and reasoning about action and knowledge. Tim joined UQ in 2023 from The University of Melbourne where he was the founding co-director of The Centre for AI and Digital Ethics.

DR CAITLIN CURTIS
Panel Member

Caitlin Curtis is interested in science and technology and their impacts on society. She comes from a robust science foundation in genomics with subsequent training and experience in policy and communication. More recently, her work has expanded to be more interdisciplinary, investigating the impact of science and emerging technology on society – with a particular focus on trust in artificial intelligence and emerging genomics technologies She has a deliberate focus on public and stakeholder engagement

ASSOCIATE PROFESSOR NICHOLAS CARAH
Panel Member

Nicholas Carah is an Associate Professor in the School of Communication and Arts and Director of Digital Cultures & Societies at The University of Queensland. His research examines the algorithmic and participatory advertising model of digital media platforms, with a focus on the digital alcohol marketing. He has also been involved in research projects on alcohol-related harms and nightlife culture and the use of digital media in fostering cultural change in drinking culture. He is an Associate Investigator in the ARC Centre of Excellence for Automated Decision-Making and Society. He is a Chief Investigator on ARC Discovery and Linkage projects. He is a director of the Foundation for Alcohol Research and Education.

INTERACTIVE SESSION

DR IVANO BONGIOVANNI
Facilitator

Ivano Bongiovanni is a researcher, consultant, author, and speaker whose work focuses on the managerial and business implications of Cybersecurity. He is a Lecturer in Information Security, Governance and Leadership with the UQ Business School and a member of UQ Cyber, Ivano helps business leaders and executives make evidence-based decisions in cybersecurity. With a professional background in risk and security management, Ivano's work bridges the gap between technical cybersecurity and its repercussions across organisations. He has advised ministers, policy-makers, board members, and senior executives on strategies, governance structures, policies, and training programs for effective cybersecurity management. Ivano is also an experienced facilitator in the fields of Design Thinking and Design-Led innovation, having run since 2015 more than 50 design-led workshops and longer projects for public and private sector organisations.