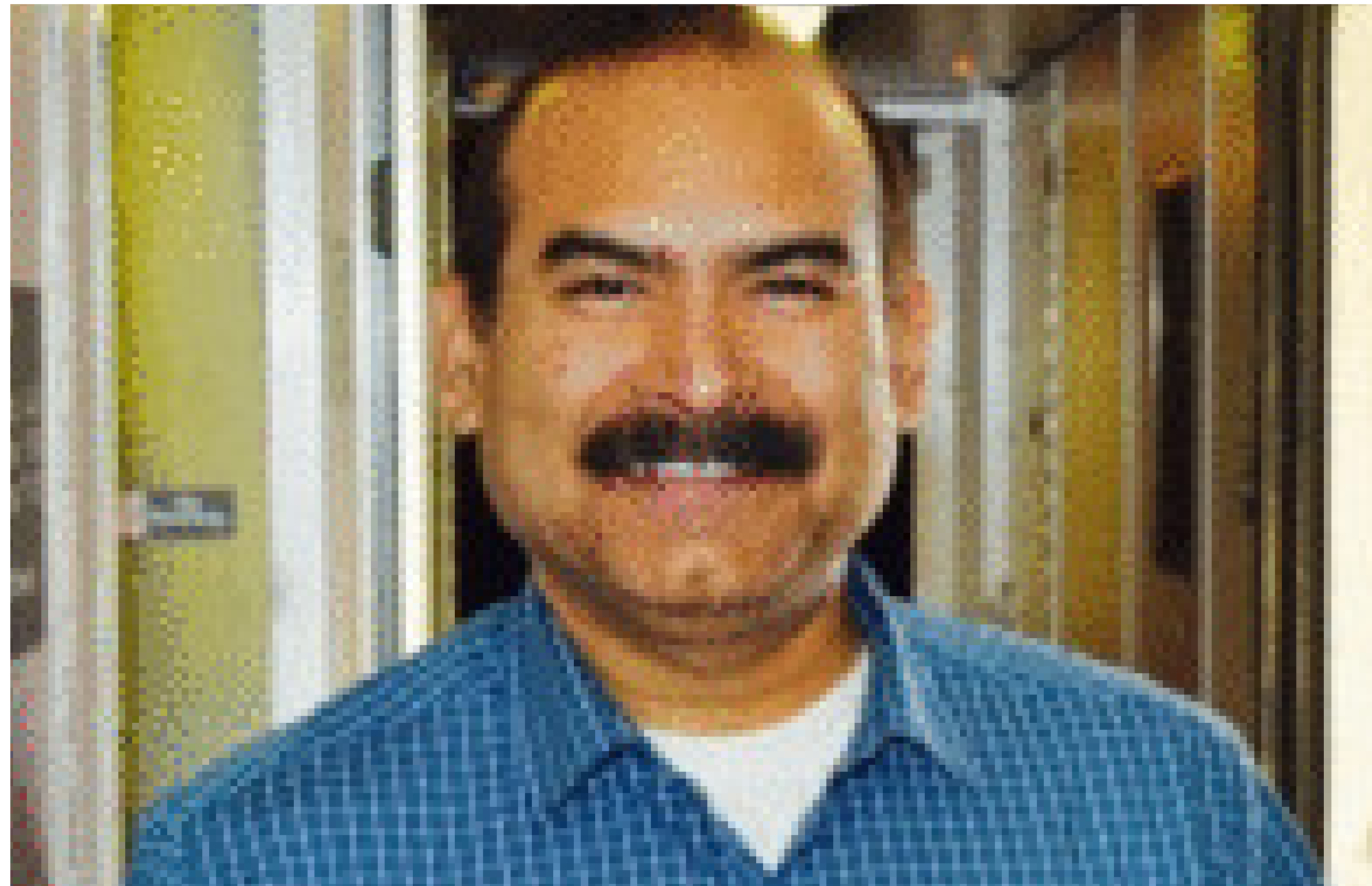


# IEEE CSDE/ i-COSTE 2020 Keynote Speakers



Speaker: **Mr Animesh Mishra**

Keynote I Topic: Rise of AI/ML and Computation Growth

## Physical and Virtual Venue

Melbourne Marriott Hotel, Melbourne 3000, Australia

[Zoom](#)

### Keynote I

**16th December 2020; Time: 16:30 - 17:15 AEDT**

Speaker: **Mr Animesh Mishra**, Senior Director  
Architecture, Intel Corporation, Santa Clara, USA.

### Keynote II

**17th December 2020; Time: 16:00 – 16:45 AEDT**

Speaker: **Professor Pablo Moscato**, The University  
of Newcastle, Australia

### Keynote III

**17th December 2020; Time: 16:50 – 17:35 AEDT**

Speaker: **Dr Mark Griffin**, University of Sydney,  
Australia

### Keynote IV

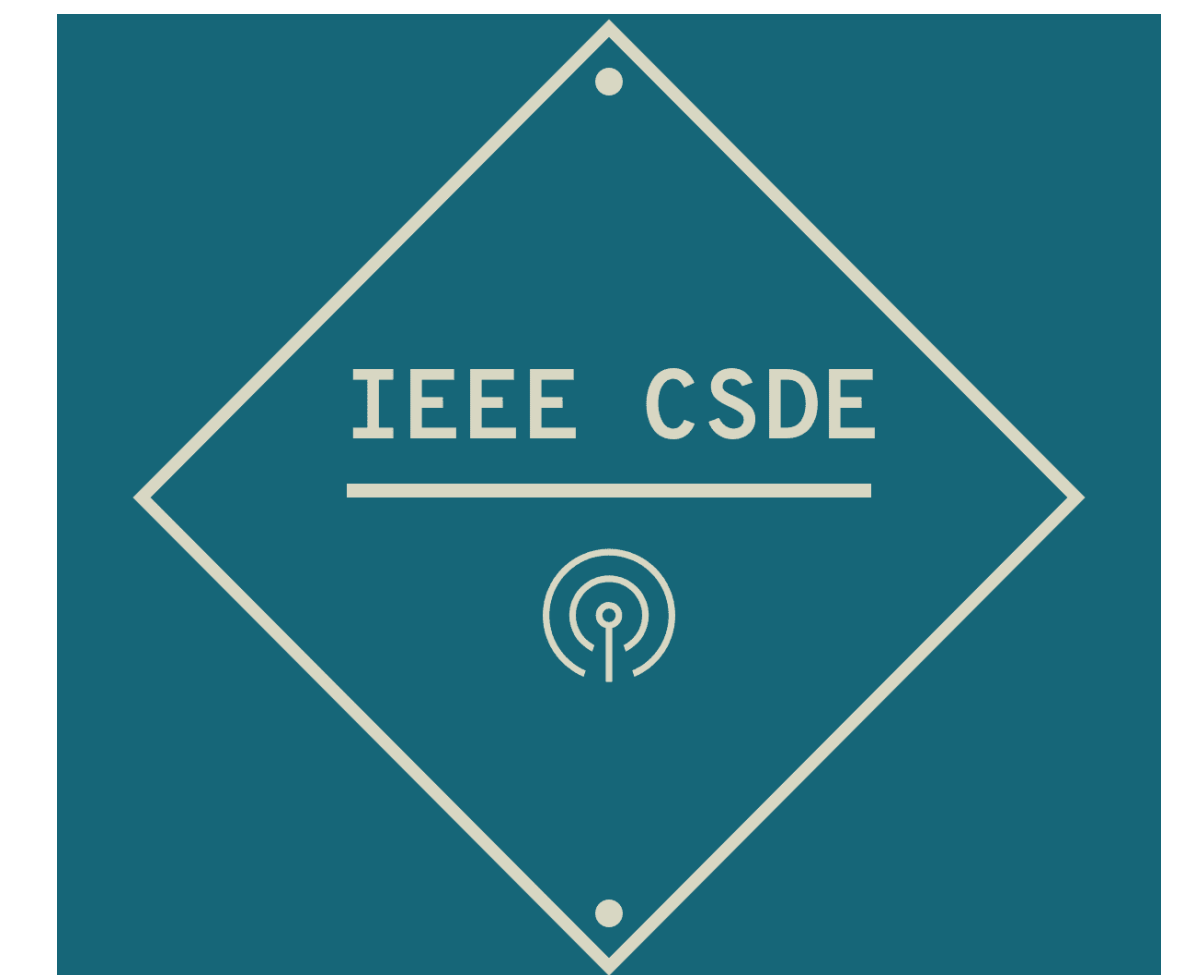
**18th December 2020; Time: 16:00 – 16:45 AEDT**

Speaker: **Professor Suzanne Wilkinson**, Massey  
University, New Zealand

### Keynote V

**18th December 2020; Time: 16:50 – 17:35 AEDT**

Speaker: **Scientia Professor Boualem Benatallah**,  
UNSW, Australia



Mr Mishra is a senior director at Intel Corporation and has vast experience in proven End-to-End product development and management in Enterprise, Embedded, Personal Computing, Digital Security and Autonomous Driving Systems with +45 patents granted and in pipeline. He holds one of the most coveted Intel Patents on Multicore Load balancing and Power Management Technology.

- His innovations are experienced by us daily as we use our computing devices thru extensive Power Management of the DRAM.
- Mr Mishra was the Chief architect for Silicon and Systems for Pioneering Computer Vision (CV) / Machine learning (ML) Video Analytics Co-processor at Intel Corporation.
- Chief Architect for Intel RealSense 3D Stereo Depth Camera- IO and Power Management Subsystem
- An accomplished Architect in Fault Tolerant (HFT), Fault Resilient IPs (FRI) for Autonomous Driving and the list goes on.
- Mr Mishra directs Edge Artificial Intelligence (AI) / Machine Learning (ML) Systems On Chip ( SoC) implementations.
- He is a strong believer in sustainable technologies and it's impact on humankind.



Speaker: **Professor Pablo Moscato**

**Keynote II Topic:** A new method for Artificial Intelligence inspired in 1748's Mathematics?

Professor Pablo Moscato's work is expertly augmenting human intelligence with computational methods to produce an unprecedented transformation in the practice of decision making in Australia and around the globe.

Professor Moscato has always been a pioneer and champion of lateral thinking. Thirty years ago, he created an entirely new field of computer science known as "memetic algorithms"—labelled one of the greatest research frontiers in the combined fields of mathematics, computing, and engineering.

Today, a Google search for memetic algorithms retrieves nearly 273,000 results. More than 22,100 academic papers cite the subject, and more than 700 papers published in China alone use the word "memetic" in their title. These impressive results make Moscato one of the world's most cited computer scientists—and based on one of his earliest new ideas alone.

Professor Moscato's work is having a resounding impact across multiple industries and fields, including marketing and business intelligence. Computer algorithms are creating smart data-driven methods of analysing online consumer behaviours and brand engagement. In the preface of his recently co-edited book, *Business and Consumer Analytics: New Ideas* (2019), together with his co-editor, he explains how marketers and decision-makers must adjust to this data-driven revolution.

Moscato's work has a multitude of surprisingly novel applications. In digital humanities, his data science expertise has provided valuable and fascinating insights into globally cherished artworks such as Shakespearean era plays and poems.

Moscato's most recent medical research is exploring the mechanism of action for Alzheimer's and cancer drugs, which is largely determined in vitro, using data to generate new insights into complex health challenges.

Professor Moscato is convinced that the best translation comes from the most innovative new concepts in computer science, and good algorithms should be able to jump the field barriers and find new and much-needed applications elsewhere.



Speaker: **Dr. Mark Griffin**

**Keynote III Topic:** Business Analytics - is it more than just Data Science?

Dr Mark Griffin is a Data Scientist who divides his time between Insight Research Services Associated, the University of Queensland, and Central Queensland University. Mark founded Insight in 2011 to provide training and consulting across the areas of business, statistics, and information technology (he has now presented over 100 two-day and 30 five-day workshops). Mark is an Industry Fellow and Casual Lecturer in the UQ School of Business where he teaches within the Major in Business Analytics in the Bachelor of Advanced Business. Mark also works through the CQU School of Graduate Research where he provides training and one-on-one consulting in statistics with their 500 Research and Higher Degree students across Australia and overseas. Mark serves on the Executive Committee for the Statistical Society of Australia, is the Founder and Co-Chair of the Special Interest Group for Business Analytics within the International Institute of Business Analysis, and is a Senior Member of the IEEE.



Speaker: **Professor Suzanne Wilkinson**

## Keynote IV Topic: Encouraging Resilience Building in Engineering

Suzanne Wilkinson is a Professor of Construction Management in the New School for Built Environment, Massey University, Director of Postgraduate Studies, School for Built Environment and Associate Dean (Research), College of Sciences, Massey University. She has a PhD in Construction Management, and a BEng (Hons) in Civil Engineering, both from Oxford Brookes University, and a Graduate Diploma in Business Studies (Dispute Resolution) from Massey University. Prior to working at Massey University, Suzanne was at the University of Auckland, Department of Civil and Environmental Engineering, from lecturer to Professor and Deputy Head of Department.

Suzanne's research focuses on resilience, disaster management, construction innovation and smart cities. She is interested in how cities, communities and organisations plan for disasters and manage hazard events and has a particular interest in how cities, communities and organisations rebuild and recover. Suzanne has been advisor to organisations on resilience building and disaster recovery, most recently including Auckland Council, MCDEM, NZTA and Hunter Water in Australia. Suzanne recently ended her term as theme leader (Urban) in the National Science Challenge: Resilience to Nature's Challenges and is currently working with RNC, EQC and MBIE on various research projects. Suzanne is a research assessor for MBIE and The Royal Society. She has published over 300 papers and co-written 3 books, the most recent being *Resilient Post Disaster Recovery Through Building Back Better* (Routledge in 2019), with her colleagues Sandeeka Mannakkara and Regan Potangaroa. Suzanne is a keen PhD supervisor and has now supervised to completion 30 PhD students.



**Scientia Professor Boualem Benatallah**

**Keynote V Topic:** Natural Language based Augmentation of Conversations with Processes: Issues, Applications and Directions

Prof. Boualem Benatallah is a Scientia professor and research group leader at the School of Computer Science (CSE), University of New South Wales (UNSW, Sydney, Australia). He held the chaire d'excellence position of the Auvergne Region in France (LIMOS, France, 2008-2010). His main research interests are developing fundamental concepts and techniques in Web service composition, cloud services engineering and management, integration, crowd sourcing services, data curation, cognitive services and business processes management. He has published more than 250 refereed papers including more than 80 journal papers. Most of his papers appeared in very selective and reputable conferences and journals. His research interests include: WebService/API Engineering and Management; Quality Control in Crowdsourcing Services; Integrating Conversational AI with Cognitive, Adaptive and Actionable Services; Data Curation; Cognitive Case Management and Business Process Management with applications in IoT/smart cities; investigations and process mining; Human and Machine Computation for : (i) Security Vulnerability Discovery and (ii) systematic literature reviews; Socio, technical and computational services for research and project-based learning; and Cloud Services Orchestration to name few. He has been frequently invited to give keynote talks, lectures and tutorials on service computing in international conferences and summer schools. He has a very strong international track record demonstrated by the high citations of his work, some of which are considered seminal in the field of services composition. He also has strong collaboration with Industry including projects, consultancy on enterprise computing, and patents. Boualem has been general and PC chair of number of international conferences. He has been guest editor of several special issues for reputable international journals. He is member of the steering committee of BPM and ICSOC conferences. He is member of the editorial board of numerous international journals. He was a visiting Professor at INRIA-LORIA, CNRS, Claude Bernard University (France), University of Blaise Pascal (Clermont Ferrand, France), University of Trento (Italy). He was member of the team (comprising multiple university, government and industry partners) that constructed the successful bid for the Smart Services CRC. He is leader of the data curation foundry research stream at the Data to Decisions CRC. He is member of Executive Committee of IEEE Computer Society's Technical Committee on Business Informatics and Systems.