2016 Applied Informatics and Technology Innovation Conference (AITIC 2016)

22-24 November 2016, Newcastle, Australia

http://air.newcastle.edu.au/AIR_files/Conference2016.html

Call for Papers

Informatics concerns the use of information, and addresses research questions about how information is generated, processed and used, irrespective of the domain or application area. Applied Informatics is the study of Information & Communication Technology (ICT) and its uses, with emphasis on its application to real-world problems. The topics for the conference focus on applications for assisting industry and organisations to understand, and ultimately leverage, the data that they capture and store.

AITIC 2016 features international research in informatics and related areas, with a focus on practical applications and innovations that can be exploited for the benefit of business solutions. The Applied Informatics Research (AIR) Group is organising this conference to provide an opportunity to meet with other researchers in the areas, and to share recent results in research in this field. The conference will be interdisciplinary in nature, and we encourage submissions from both academics and practitioners.

Topics

Recommended topics include, but are not limited to, the following:

- Affective & Wearable Computing
- Artificial Intelligence
- Bioinformatics
- Computer & Cognitive Models
- Data Analytics
- Decision Support
- Digital Architecture & Built Environment
- e-Commerce
- Engineering Optimisation
- Games & Gamification
- Human-Computer Interaction
- Health Informatics
- ICT Education
- ICT Infrastructure
- ICT Policy & Governance
- ICT Security & Privacy
- Image Processing
- Information Systems
- Knowledge-based Systems
- Multimedia
- Simulation & Modelling
- Social Media and Network Analysis

Submissions

Prospective authors please see “Author Instructions” on the conference website for submission details. All accepted papers will be published in an edited volume by Springer and included in Scopus as well as other major databases.

If you would like to organise a special session or workshop on a more focused topic, please get in touch with the Special Session and Workshop Chair, Dr Ilung Pranata (Ilung.Pranata@newcastle.edu.au). For tutorial organisation, please contact the Tutorial Chair, Dr Alex Mendes (Alexandre.Mendes@newcastle.edu.au). General questions should be directed to the conference’s General Chair, Dr Raymond Chiong (Raymond.Chiong@newcastle.edu.au).

Important Dates

Special session and workshop proposals due: May 15, 2016
Tutorial proposals due: June 15, 2016
Full paper submissions due: July 1, 2016
Notification of paper acceptance: August 15, 2016
Final papers due: September 5, 2016

***Organised by*:**

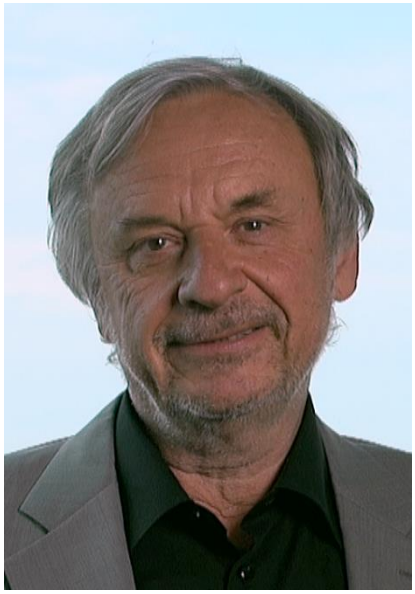
THE UNIVERSITY OF NEWCASTLE AUSTRALIA

air applied informatics research group

Conference Chairs

General Chair: Raymond Chiong
Program co-Chairs: David Cornforth and Yukun Bao
Special Session and Workshop Chair: Ilung Pranata
Tutorial Chair: Alex Mendes
Registration and Finance Chair: Kyle Holmes
Local Arrangement Chairs: Rukshan Athauda and Brian Regan
Publicity Chairs: Patrick Siarry (International) and Nasimul Noman (Local)

Keynote Speakers



Keynote Speaker 1: Emeritus Professor Zbigniew Michalewicz, Chief Scientist of Complexica, Australia

Bio: Zbigniew Michalewicz is the Chief Scientist of Complexica, an Artificial Intelligence software company that helps large organisations sell more products and services, at a higher margin, through the use of automated analytics. He is also Emeritus Professor at the School of Computer Science, University of Adelaide, and holds Professor positions at the Institute of Computer Science, Polish Academy of Sciences, and the Polish-Japanese Academy of Information Technology, as well as an honorary Professor position at the State Key Laboratory of Software Engineering of Wuhan University, China. He is associated with the Structural Complexity Laboratory at Seoul National University, South Korea, too. In December 2013, he was awarded by the President of Poland, Mr. Bronislaw Komorowski, the Order of the Rebirth of Polish Polonia Restituta - the second highest Polish state decoration for a civilian (after the Order of the White Eagle) - for outstanding achievements in the fields of education, science, sports, culture, arts, economy, national defence, social activities, the civil service and development of good relations with other countries.

For many years, his research interests were in the field of evolutionary computation. He published several books, including a monograph Genetic Algorithms + Data Structures = Evolution Programs (3 editions; a few translations; over 18,300 citations, source: Google Scholar), and over 250 technical papers in journals and conference proceedings that have been cited widely (over 40,000 citations, source: Google Scholar). He was one of the Editors-in-Chief of the Handbook of Evolutionary Computation and the General Chair of the first IEEE International Conference on Evolutionary Computation held in Orlando, June 1994.

Zbigniew Michalewicz has over 35 years of academic and industry experiences, and possesses expert knowledge of numerous Artificial Intelligence technologies. He was the co-Founder and Chief Scientist of NuTech Solutions, which was acquired by Netezza and subsequently by IBM, and the co-Founder and Chief Scientist of SolveIT Software, which was acquired by Schneider Electric after becoming the 3rd fastest growing company in Australia. Both companies grew to approximately 200 employees before they were being acquired. During his time in the corporate world, Professor Michalewicz led numerous large-scale predictive analytics and optimisation projects for major corporations, including Ford Motor, BHP Billiton, U.S. Department of Defence, and Bank of America.

Keynote Speaker 2: Professor Yew-Soon Ong, Chair of Computer Science & Engineering at Nanyang Technological University, Singapore

Bio: Yew-Soon Ong is Chair of the School of Computer Science and Engineering at Nanyang Technological University (NTU), Singapore. He served as Director of the Computational Intelligence Research Centre from 2008 to 2015. He is currently a Director of the A*Star SIMTECH-NTU Joint Lab on Complex Systems. He is also a Principal Investigator of the Data Analytics & Complex Systems Programme in the NTU-Rolls Royce Corporate Laboratory. He received his Bachelor and Master's degrees from NTU, and obtained his PhD degree from the Computational Engineering and Design Centre at the University of Southampton, UK.

His research focuses on computational intelligence (CI), particularly on evolutionary, memetic computation and machine learning. He is known for his research and development of new concepts and novel solutions and applications in memetic computation, which mimics biological evolution and cultural evolution (or learning). He founded the Task Force on Memetic Computing under the IEEE Computational Intelligence Society Emergent Technology Technical Committee and served as its Chair from 2007 to 2010. In 2009, he also co-founded the Memetic Computing journal and has been serving as its Technical Editor-in-Chief since. His work on memetic computation has been well received and he has delivered many keynote, plenary or invited talks at international conferences, workshops and research institutions worldwide. He was featured for his research work in memetic computation by the Thomson Scientific's Essential Science Indicators as one of the most cited new area of research in August 2007. He also received the 2015 IEEE Computational Intelligence Magazine Outstanding Paper Award and the 2012 IEEE Transactions on Evolutionary Computation Outstanding Paper Award for his work pertaining to Memetic Computing.