

ICIT 2023

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ICIT 2023 Special Session Proposal

Title of the Proposal:

Big Data, Machine Learning and AI in Green Computing

Technical Outline of the Session and Topics:

Green computing is the environmentally responsible and eco-friendly use of electricity and electronic resources. This special session aims to highlight the latest methodological and practical contributions in big data, machine learning, artificial intelligence and data science related to green computing at the ICIT 2023 conference. It engages the attendees of the ICIT 2023 conference on theoretical and application perspectives of green computing through big data, machine learning, artificial intelligence, data science, data mining, deep learning, reinforcement learning, business analytics, etc.

Topics of the Session:

- *Sustainable Computing*
- *Energy-aware Algorithms*
- *Thermal-aware Algorithms*
- *Big Data and data mining in Green Computing*
- *Machine Learning and artificial intelligence in Green Computing*
- *Natural Language Processing*
- *Cloud Computing in Green Computing*

Short bio and contact details of the Session Organizers

- *Organizer 1:*

Dr. Hai Wang is a Full Professor at the Sobey School of Business at Saint Mary's University in Canada. He received his Bachelor in Computer Science from the University of New Brunswick, Canada, in 1995, and his Master's and PhD in Computer Science from the University of Toronto, Canada, in 1997 and 2004 respectively. His research interests include big data, business intelligence, data mining, machine learning. He has published more than 90 papers in journals such as *IEEE Transactions on Visualization & Computer Graphics*, *Journal of Machine Learning Research*, *VLDB Journal*, *International Journal of Forecasting*, *International Journal of Production Research*, *Sustainability*. He is the current Managing Editor of the *International Journal of Data Science* published by Inderscience Publishers (<https://www.inderscience.com/jhome.php?jcode=ijds>).

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- *Organizer 2:*

Dr. Ji Zhang is a Full Professor in Computer Science in School of Sciences, Faculty of Health, Engineering and Sciences at the University of Southern Queensland (USQ), Australia. He received his PhD in Computer Science from Dalhousie University, Canada, in 2009. He is an IET Fellow, IEEE Senior Member, Australian Endeavour Fellow, Queensland International Fellow and Izaak Walton Killam Scholar. His research interests include big data analytics, data science, data mining, machine learning and computational intelligence.

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- *Organizer 3:*

Dr. Haikun Wei is the Dean of the School of Automation at Southeast University, China. His research interests include machine learning, artificial intelligence, deep learning, intelligent control systems. His papers have been published in *Neurocomputing*, *ACM Transactions on Intelligent Systems and Technology*, *Pattern Recognition*, *IEEE Transactions on Cybernetics*, *IEEE Transactions on Neural Networks and Learning Systems*.

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