



Proceedings of the 2015 6th International Conference on Automation, Robotics and Applications

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Welcome Message

It gives us immense pleasure in welcoming you to the 6th International Conference on Automation, Robotics and Applications, ICARA 2015 which is being held in the picturesque Queenstown, the adventure capital of the world. This is the first time ICARA is being held in the South Island of New Zealand.

More and more research will be centred on building robots and automation systems that can make a difference in the quality of human life. The days are not far when humanoid robots will be common in many homes and offices. Since 2004, when ICARA was first held in Palmerston North, New Zealand, it has helped to bring together researchers from different fields such as motion control and navigation; embedded systems and communication; artificial neural networks and neuro-fuzzy systems; evolutionary computation and image processing. Sensors are integral to modern automation systems; the importance of sensors is reflected in the large number of sensor related papers that will be presented in the conference. Scientists and engineers will progressively look to nature to find solutions to complex sensing and actuation problems. Biorobotics and biomechatronic systems are making tremendous progress and have a significant role to play in improving human life. Development of robots for edutainment, personal care and companionship is the next growth area.

In ICARA 2015, 144 papers were submitted. Of these, 109 papers were accepted for presentation. ICARA is truly an international conference. Based on author affiliations, 26.6% of the papers are from New Zealand. Of the remainder, 39% of the papers came from the Asia Pacific region, 21.1% from Europe, Middle East and Africa, 7.2% from Latin America and 6.1% from North America. ICARA has indeed established itself in the Australasian region as a premier conference in the rapidly advancing fields of robotics, automation and sensors. The papers accepted for ICARA 2015 will be submitted for indexing by IEEE Xplore digital library.

There are four special sessions on "Mechatronic Music", "Electric Vehicles: Advances in Drives and Steering Mechanism", "Sensing, Automation and Robotics in Agriculture" and "Humans, software Agents, Robots, Machines and Sensors (HARMS)". In addition, there will be two keynote addresses and three invited plenary talks. We are pleased to welcome Prof Thomas Braunal and Prof Asad Madni who will deliver the keynote talks. We trust you will find these talks stimulating. Special thanks are also due to Prof Elfed Lewis, Prof B M A Rahman and Dr Mehran Sarkarati for accepting our invitation to deliver the plenary talks.

Several people and organisations need to be thanked and acknowledged for their contribution to the success of the conference. We wish to thank all the authors and special session organisers for their contribution, our sponsors for the technical support and all the members of the organising committee for their tireless efforts. Thanks to all the paper reviewers for doing a thorough and timely job. Without your efforts, ICARA would not be the success that it is.

We hope that you will have a very fruitful and stimulating time at the conference and a pleasant stay in New Zealand.

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