

2nd International Conference on Intelligent Sensors, Sensor Networks and Information Processing – 2005

5-8 December 2005, Melbourne, Australia

Concluding Report

The 2nd International Conference on Intelligent Sensors, Sensor Networks and Information Processing was held successfully in Melbourne, Australia. Melbourne is rated as one of the most liveable cities in the world. The conference was held in The Langham Hotel on Southbank overlooking the city of Melbourne. The view was exceptional across the Yarra River.

The conference was organised under the umbrella of the Australian Research Council's Research Network - ISSNIP. It was sponsored by DSTO Australia, DARPA-USA, Multimedia Victoria Government, IDM Instruments Australia Pty Ltd and technically co-sponsored by IEEE Sensor Council. This year, the conference was jointly held with the first IEEE e-Science conference on Grid Computing. The combined conferences attracted more than 350 participants representing more than 30 countries. The ISSNIP conference itself attracted 200 participants.

The objective of the conference was to provide an opportunity for both engineers and scientists working in various fields like intelligent sensors, sensor networks and information processing to meet and to present new ideas, achievements and experiences. It was an ideal platform to establish closer links among researchers and practitioners of the ARC research network on Sensor Networks. In addition, the conference this year put extra emphasis on student participation in order to encourage further interest in the research field of Sensors and Sensor Networks. 40 student grants which waived conference registrations were offered for both ISSNIP and e-Science for which 65 applications were received.

The first day of the conference included tutorials from internationally acclaimed experts from the University of California, Berkeley, the University of Texas, USA the University of Missouri-Rolla, USA and the University of Technology, Sydney Australia. The ISSNIP conference featured 6 keynote talks from eminent researchers representing every major region in the world. These include Prof. Jan Rabaey, UCI Berkeley, Dr. John Parmentola, US Army, Prof. M. Srinivasan, ANU, Prof. Stuart Milner, U. Maryland, Prof. Vittal Rao, NSF and Prof. Rob Evans, U. Melbourne. In addition, there were 4 invited talks from researchers representing The Bionic Ear Institute, DSTO and CSIRO.

In addition, three workshops were successfully held during the conference. These were the DEST workshop on Distributed Sensor Networks chaired by M. Palaniswami (UniMelb), the workshop on Unmanned Aerial Vehicles chaired by Anthony Finn (DSTO, Australia) and the workshop on Machine Learning for Applications in Sensor Networks chaired by Danil Prokhorov (Toyota, USA). The DEST workshop was a high-level meeting held between 12 invited delegates from US, Europe and Australia. This session proved to be more of a brainstorming meeting which resulted in draft plan for future collaboration in the field of Distributed Sensor Networks for the coming years.

The first industrial showcase in the field of Sensors and Sensor Networks was held in this conference and featured three presentations from IDM Instruments, Boeing USA and Ambient Systems. The session attracted quite a lot of interest and is planned for the next conference.

The conference technical committee received about 115 papers for the conference. The committee selected top 72 papers (56 papers for oral

presentation and 16 papers for poster presentation) which were published in the IEEE Proceedings.

The inaugural cocktail evening was held in the top level of Langham which provided the delegates with a picturesque view of Melbourne skyline. The conference dinner was held at the Melbourne Aquarium overlooking the beautiful Yarra River and the décor inside was of the Great Barrier Reef which was one of the themes in the conference. Prof. Jannie Van Deventer, Dean of Faculty of Engineering in the University of Melbourne delivered the conference dinner address. A special conference tour was also organized which included a scenic city tour complete with a tour dinner on board. This tour was joined by some 80 conference delegates going in two buses. In addition, a set of student activities was also organized which was a great opportunity for student networking and future collaborations. The conference lunches for students were held at the Sante Buffet in Crown and were enthusiastically joined by more than 60 students every day. A student BBQ dinner was held on the South Lawn of Melbourne University which was thoroughly enjoyed, followed by a movie and a social night with further networking and discussion.

As a result of the conference, a student workshop is being planned for August, 2006 which will concentrate on the themes of the ISSNIP and e-Science conferences. A workshop on Environmental Sensor Networks in May 2006 is also planned in Townsville. Another workshop on Biomedical Informatics is slated to run in December 2006 in Sydney. The International Advisory committee decided to run the 3rd International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP 2007) in Cairns, Australia in June 2007.