AIS 2011, the International Conference on Autonomous and Intelligent Systems, held in Burnaby, British Columbia, Canada, June 22–24, 2011 was the second edition in the AIS series of annual conferences alternating between Europe and North America. The idea of organizing these conferences was to foster collaboration and exchange between researchers and scientists in the broad fields of autonomous design and intelligent systems, addressing recent advances in theory, methodology and applications. AIS 2011 was organized at the same time with ICIAR 2011, the International Conference on Image Analysis and Recognition. Both conferences are organized by AIMI—Association for Image and Machine Intelligence, a not-for-profit organization registered in Ontario, Canada, and co-sponsored by the Center for Pattern Analysis and Machine Intelligence of the University of Waterloo, the Kitchener Waterloo Chapters of the IEEE Computational Intelligence Society and the IEEE Systems, Man and Cybernetics Society.

For AIS 2011, we received a total of 62 full papers from 23 countries. The review process was carried out by members of the Program Committee and other reviewers; all are experts in various areas of the conference. Each paper was reviewed by at least two reviewers and checked by the Conference Chairs. A total of 40 papers were finally accepted and appear in one volume of the proceedings. The high quality of the papers is attributed first to the authors, and second to the quality of the reviews provided by the experts. We would like to sincerely thank the authors for responding to our call, and to thank the reviewers for their careful evaluation and feedback provided to the authors. It is this collective effort that resulted in the strong conference program and high-quality proceedings.

This year AIS provided some travel grants to a limited number of authors attending from outside North America.

We were very pleased to be able to include in the conference program keynote talks by well-known experts: Toshio Fukuda, Nagoya University, Japan; William A. Gruver, Simon Fraser University, Canada; Ze-Nian Li, Simon Fraser University, Canada; Andrew Sixsmith, Simon Fraser University, Canada; and Patrick Wang, Northeastern University Boston, United States of America. We would like to express our sincere gratitude to the keynote speakers for accepting our invitation to share their vision and recent advances in their specialized areas.

Special thanks are also due to Jie Liang, Chair of the local Organizing Committee, and members of the committee for their advice and help. We are thankful for the support and facilities provided by Simon Fraser University. We are also grateful to Springer’s editorial staff, for supporting this publication in the Lecture Notes in Artificial Intelligence (LNAI) series.
We would like to thank Khaled Hammouda, the webmaster of the conference, for maintaining the Web pages, interacting with the authors and preparing the proceedings.

Finally, we were very pleased to welcome all the participants to AIS 2011. For those who were not able to attend, we hope this publication provides a good view of the research presented at the conference, and we look forward to meeting you at the next AIS conference.

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AIS 2011 – International Conference on Autonomous and Intelligent Systems

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