

## Preface

ICIAR 2017 was the 14th edition in the series of annual conferences on image analysis and recognition, offering a forum for participants to interact and present their latest research contributions in theory, methodology, and applications of image analysis and recognition. ICIAR 2017, the International Conference on Image Analysis and Recognition was held in Montreal, Canada, July 5–7, 2017. ICIAR is organized by AIMI - Association for Image and Machine Intelligence, a not-for-profit organization registered in Ontario, Canada.

We received a total of 133 papers from 33 countries. Before the review process, all the papers were checked for similarity using a comparison database of scholarly work. The review process was carried out by members of the Program Committee and other reviewers. Each paper was reviewed by at least two reviewers, and checked by the conference chairs. A total of 73 papers were finally accepted and appear in these proceedings. We would like to express our gratitude to the authors for their contribution, and we thank the reviewers for the careful evaluation and feedback provided to the authors. It is this collective effort that resulted in the strong conference program and high-quality proceedings.

We were very pleased to include three outstanding keynote talks: “The Role of Ultrasound and Augmented Reality for Intra-cardiac Beating Heart Interventions” by Terry Peters, Western University, Canada; “Matrix-Tensor Representation and Deep Learning in Large-Scale Image Data Analysis” by Tien Bui, Concordia University, Canada; and “Discovering Deep Knowledge from Biosequence and Temporal Sequence Data” by Andrew K. C. Wong, University of Waterloo, Canada. We have also included in this year’s program, a special session on Machine Learning for Medical Image Computing, organized by Alex Wong, of the University of Waterloo, Canada, and Farzad Khalvati of Sunnybrook Research Institute in Toronto, Canada. We would like to express our gratitude to the keynote speakers and the special session organizers for accepting our invitation to share their vision and recent advances in their areas of expertise.

We would like to thank Khaled Hammouda, the webmaster of the conference, for maintaining the website, managing the registrations, interacting with the authors, and preparing the proceedings. We are also grateful to Springer’s editorial staff, for supporting this publication in the LNCS series. We also would like to acknowledge the members of the local Organizing Committee for their assistance and support during the organization of the conference, and the École Polytechnique de Montreal for making the venue available.

Finally, we were very pleased to welcome all the participants to ICIAR 2017 in Montreal. For those who were not able to attend, we hope this publication provides a good view into the research work presented at the conference, and we look forward to meeting you at the next ICIAR conference.

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