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Pattern Recognition and Artificial Intelligence

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Preface

Message from the Honorable Chair and General Chair

Welcome to the proceedings of the Second International Conference on Pattern Recognition and Artificial Intelligence (ICPRAI 2020). This conference follows the successful ICPRAI 2018, held in Montreal, Canada, in May 2018. It was organized by CENPARMI (Centre for Pattern Recognition and Machine Intelligence) at Concordia University, Montreal, Canada, with the co-operation of the Chinese Association of Science and Technology, China, and other universities from China and abroad. The Organizing Committee of ICPRAI 2020 consisted of well-known experts from all six continents of the world with a dream team of eight world-renowned keynote speakers to cover the new PRAI frontiers in depth and in breadth with insights. The technical program included 74 presentations in 5 tracks related to handwriting and text processing, computer vision and image processing, machine learning and deep networks, medical applications, forensic science and medical diagnosis, features and classification techniques, and various applications. In addition, a workshop on Social Media Processing was also organized.

Pattern Recognition and AI techniques and systems have been applied successfully to solve practical problems in many domains. In co-operation with CENPARMI members and colleagues at other institutions, ICPRAI 2020 is co-sponsored by the Chinese Association of Science and Technology and numerous universities and industrial companies. It brings together a large number of scientists from all over the world to present their innovative ideas and report on their latest findings, as well as the fruitful results of numerous CENPARMI members and their students in handwriting recognition, forensic studies, face recognition, medical imaging, deep learning, and classification techniques. In addition to the rich technical program, our conference also featured practical sessions to encourage author-editor and inventor-investor interactions, and social events for all conference participants.

For all the above activities, we would like to thank all those involved for a superb technical program and conference proceedings: conference co-chairs, Edwin Hancock and Patrick Wang; track co-chairs, Yue Lu, Nicole Vincent, Pong Chi Yuen, Farida Cheriet, and Wei-Shi Zheng; workshop co-chairs, Kam-Fai Wong and Binyang Li; special session chair, Olga Ormandjieva; as well as the publication and publicity chairs and their committee members.

We would like to express our gratitude to the numerous committee members for taking care of financial and sponsorship matters (Louisa Lam, Wen Song, Marleah Blom, Mounîm El Yacoubi, and Jun Tan). Special thanks go to local arrangements of the Chinese Association of Science and Technology and the government officials of Zhongshan City, and Nicola Nobile who dedicated himself to a great variety of duties, ranging from conference secretariat business, publications, software for handling paper submissions, reviews to selections, plus numerous other chores. They, together with

CENPARMI members and students, created a very warm and comfortable environment to work in.

Thanks are also due to the organizations listed in the proceedings and those of the organizers of ICPRAI 2020, and the administration of Zhongshan City.

Finally, I hope you found this conference to be a rewarding and memorable experience. We hope you enjoyed your stay in the beautiful Zhongshan City, a hub in the Guangdong, Hong Kong, Macau Greater Bay Area, and the birthplace of great historical figure Dr. Sun Yat-sen.

August 2020

Ching Y. Suen
Yuan Y. Tang

Organization

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Keynote Speakers

ICPRAI 2020 was proud to host the following keynote speakers:

Hironobu Fujiyoshi	Chubu University, Japan	“Visualizing Direction of Attention to Understand AI Decisions”
Seong-Whan Lee	Korea University, South Korea	“Recent Advances and Future Prospects of Brain-Computer Interface”
Cheng-Lin Liu	Institute of Automation of Chinese Academy of Sciences, China	“New Frontiers of Document Image Analysis and Recognition”
Farida Cheriet	Polytechnique Montreal, Canada	“PRAI in Multimodal Medical Image Analysis: Applications and Challenges”
Nicole Vincent and Camille Kurtz	University of Paris, France	“Optimal Choices of Features in Image Analysis”
Sheila Lowe	American Handwriting Analysis Foundation, USA	“Revealing Human Personality Through Handwriting Analysis”
Bidyut B. Chaudhuri	Techno India University, India	“Improvement of Deep Neural Net for Machine Learning”
David Zhang	The Chinese University of Hong Kong, Hong Kong, China	“Advanced Biometrics: Research and Development”

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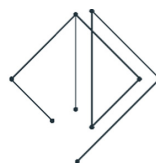
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