

Preface

This volume of *Lecture Notes in Computer Science* constitutes the proceedings of the 12th International Symposium of Neural Networks (ISNN 2015) held during October 15–18, 2015, in Jeju, Korea. During the last 11 years, this annual symposium has become a well-recognized conference in the community of neural networks. This year the symposium was held for the first time outside China, in Jeju, a very beautiful city in Korea. As usual, it achieved great success.

During the last “winter” of neural network research, ISNN was among only a few conferences focusing on theories and applications of neural networks. We never gave up our research because we believe that neural networks are very useful. Now we are witnessing the revival of neural networks. In this context, ISNN 2015 aimed at providing an open academic forum for researchers, engineers, and students to celebrate the spring of neural networks, to discuss the emerging areas and challenges, and to exchange their fantastic ideas. It encouraged open discussion, disagreement, criticism, and debate, and we think this is the right way to push the field forward.

This year, we received 97 submissions from about 188 authors in 19 countries and regions (Australia, Austria, China, Finland, France, Germany, Hong Kong, India, Iran, Macao, Malaysia, New Zealand, Pakistan, Qatar, Sri Lanka, Thailand, The Republic of Korea, Tunisia, USA). Based on the rigorous peer-reviews by the Program Committee members and reviewers, 55 high-quality papers were selected for publication in the LNCS proceedings. These papers cover many topics of neural network-related research including intelligent control, neurodynamic analysis, memristive neurodynamics, computer vision, signal processing, machine learning, optimization etc.

Many organizations and volunteers made great contributions toward the success of this symposium. We would like to express our sincere gratitude to The Chinese University of Hong Kong, Pusan National University, Korean Institute of Intelligent Systems, International Neural Network Society, IEEE Computational Intelligence Society, and Asia Pacific Neural Network Assembly for their technical co-sponsorship. We would also like to sincerely thank all the committee members for all their great efforts and time in organizing the symposium. Special thanks go to the Program Committee members and reviewers whose insightful reviews and timely feedback ensured the high quality of the accepted papers and the smooth flow of the symposium. We would also like to thank Springer for

their cooperation in publishing the proceedings in the prestigious *Lecture Notes in Computer Science* series. Finally, we would like to thank all the speakers, authors, and participants for their support.

August 2015

Xiaolin Hu
Yousheng Xia
Yunong Zhang
Dongbin Zhao

Advances in Neural Networks – ISNN 2015

12th International Symposium on Neural Networks,
ISNN 2015, Jeju, South Korea, October 15–18, 2015,
Proceedings

Hu, X.; Xia, Y.; Zhang, Y.; Zhao, D. (Eds.)

2015, XVI, 510 p. 203 illus., Softcover

ISBN: 978-3-319-25392-3