This volume is part of the four-volume proceedings of the 22nd International Conference on Neural Information Processing (ICONIP 2015), which was held in Istanbul, Turkey, during November 9–12, 2015. The ICONIP is an annual conference of the Asia Pacific Neural Network Assembly (APNNA; which was reformed in 2015 as the Asia Pacific Neural Network Society, APNNS). This series of ICONIP conferences has been held annually since 1994 in Seoul and has become one of the leading international conferences in the areas of artificial intelligence and neural networks.

ICONIP 2015 received a total of 432 submissions by scholars coming from 42 countries/regions across six continents. Based on a rigorous peer-review process where each submission was evaluated by an average of two qualified reviewers, a total of 301 high-quality papers were selected for publication in the reputable series of Lecture Notes in Computer Science (LNCS). The selected papers cover major topics of theoretical research, empirical study, and applications of neural information processing research. ICONIP 2015 also featured the Cybersecurity Data Mining Competition and Workshop (CDMC 2015), which was jointly held with ICONIP 2015. Nine papers from CDMC 2015 were selected for the conference proceedings.

In addition to the contributed papers, the ICONIP 2015 technical program also featured four invited speakers, Nik Kasabov (Auckland University of Technology, New Zealand), Jun Wang (The Chinese University of Hong Kong), Tom Heskes (Radboud University, Nijmegen, The Netherlands), and Michel Verleysen (Université catholique de Louvain, Belgium).

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We would like to thank Springer for publishing the proceedings in the prestigious series of Lecture Notes in Computer Science. Finally, we would like to thank all the speakers, authors, and participants for their contribution and support in making ICONIP 2015 a successful event.

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