Communications in Computer and Information Science

629

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Chrisina Jayne · Lazaros Iliadis (Eds.)

Engineering Applications of Neural Networks

17th International Conference, EANN 2016 Aberdeen, UK, September 2–5, 2016 Proceedings



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ISSN 1865-0929 ISSN 1865-0937 (electronic)
Communications in Computer and Information Science
ISBN 978-3-319-44187-0 ISBN 978-3-319-44188-7 (eBook)
DOI 10.1007/978-3-319-44188-7

Library of Congress Control Number: 2016947184

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Preface

The 17th International Conference on Engineering Applications of Neural Networks (EANN) was held at Robert Gordon University in Aberdeen, UK, during September, 2016. The supporters for the conference were the International Neural Network Society (INNS), The Scottish Informatics and Computer Science Alliance (SICSA), Visit Aberdeen, Visit Scotland, and Robert Gordon University in Aberdeen, UK. The 17th EANN 2016 attracted delegates from 12 countries across the world: Czech Republic, China, Chile, Colombia, Greece, Italy, Japan, Poland, Portugal, Russia, the UK, and USA.

The volume includes 22 full papers, three short papers, and two tutorial papers. All papers were subject to a rigorous peer-review process by at least two independent academic referees. EANN 2016 accepted approximately 53 % of the submitted papers as full papers. The authors of the best 10 papers were invited to submit extended contributions for inclusion in a special issue of *Neural Computing and Applications* (Springer). The papers demonstrate a variety of novel neural network and other computational intelligence approaches applied to challenging real-world problems. The papers cover topics such as: convolutional neural networks and deep learning applications, real-time systems, ensemble classification, chaotic neural networks, self-organizing maps applications, intelligent cyber physical systems, text analysis, emotion recognition, and optimization problems.

The following keynote speakers were invited and gave lectures on exciting neural network application topics:

- Professor Nikola Kasabov, Director and Founder, Knowledge Engineering and Discovery Research Institute (KEDRI), Chair of Knowledge Engineering, Auckland University of Technology, New Zealand
- Professor Marley Vellasco, Head of the Electrical Engineering Department and the Applied Computational Intelligence Laboratory (ICA) at PUC-Rio, Brazil
- Professor John MacIntyre, Dean of the Faculty of Appliced Sciences, Pro Vice Chancellor Director of Research, Innovation and Employer Engagement, University of Sunderland, UK

On behalf of the conference Organizing Committee we would like to thank all those who contributed to the organization of this year's program, and in particular the Program Committee members.

September 2016

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