

Advances in Intelligent Systems and Computing

Volume 650

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Preface

This volume contains the papers to be presented at the 17th UK Workshop on Computational Intelligence (UKCI 2017), which will be held in Cardiff, UK, on 6–8 September 2017. Since 2001, UKCI has been the UK premier forum for presenting leading research on all aspects of Computational Intelligence. The overall objective of UKCI is to encourage the academic community and industry to share and exchange ideas on theoretical and practical aspects of Computational Intelligence techniques.

UKCI 2017 has attracted 40 submissions, on areas such as fuzzy systems, neural networks, evolutionary computation, machine learning, data mining, robotics, and big data. A growing number of researchers focus on solving problems related to traffic congestion, which is an important global challenge. To emphasise this important trend, UKCI 2017 has featured a special track on Intelligent Transportation.

Each paper was reviewed by at least three members of the programme committee. Based on their recommendations, 34 papers have been accepted for publication (25 long papers and nine short papers), of which 32 appear in this volume (after two papers have been withdrawn). These papers have been organised into five sections: (1) Modelling and Representation, (2) Optimisation, (3) Learning, (4) Control and Human-Machine Systems, and (5) Intelligent Transportation.

Although UKCI has been advertised mainly as a national event for the UK, it has always attracted significant attention from further afield. UKCI 2017 continued this trend by featuring papers and participants from a number of countries on several continents, including Saudi Arabia, Japan, China, Hong Kong, Turkey, and Singapore. In this respect, UKCI 2017 is a clear manifestation of the fact that academic research is international and collaborative by nature.

The UKCI 2017 programme also featured keynote talks by established researchers in the field of Computational Intelligence.

Finally, we would like to thank everyone who contributed to the success of UKCI 2017, the members of the programme and organising committees, the keynote speakers, the authors, and the presenters of papers. We are grateful for support from the Welsh Government for the organisation of the special track on Intelligent Transportation.

July 2017

Fei Chao
Steven Schockaert
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