

# Preface

The 16th UK Workshop on Computational Intelligence (UKCI 2016) was held at Lancaster University, UK, 7–9 September 2016. The workshop was sponsored by Springer through best paper awards for academics and students.

UKCI has been the premier UK event for presenting leading research on all aspects of Computational Intelligence since 2001. The aim of UKCI 2016 was to provide a forum for the academic community and industry to share and exchange recent ideas about developing and using Computational Intelligence techniques.

Computational Intelligence is a rapidly expanding research field, attracting a large number of scientists, engineers and practitioners working in areas such as fuzzy systems, neural networks, evolutionary computation, evolving systems and machine learning. A growing number of companies are employing Computational Intelligence techniques to improve previous solutions and to deal with new problems. These include evolving systems that allow high performance in spite of changes which are either external or internal to the system, thereby increasing the reusability of developed systems. These also include smart, intelligent, autonomous, self-learning, self-adapting, self-calibrating and self-tuning systems.

Although UKCI has been advertised mainly as a national event for the UK, it has always attracted significant attention from further afield. UKCI 2016 continued this trend by featuring papers and participants from a number of countries on several continents such as USA, Japan, Italy, Greece, Ireland, Egypt, China and Saudi Arabia. In this respect, UKCI 2016 was a clear manifestation of the fact that academic research is international and collaborative by nature.

The UKCI 2016 programme featured key note talks by three established researchers in the field of Computational Intelligence—Prof. Jose Principe, University of Florida, USA; Prof. Steve Furber, University of Manchester, UK; and Prof. Trevor Martin, University of Bristol, UK. The talks provided a broad overview of novel and promising developments in the field.

This book includes 32 full papers that were accepted for presentation at UKCI 2016 following a stringent peer-review process. All papers were presented at regular sequential sessions. Authors of selected high-quality papers will be invited

after the conference to submit extended versions of their papers for possible publication in special issues for the Springer Journals on Evolving Systems and Soft Computing.

Finally, we would like to thank everyone who contributed to the success of UKCI 2016 and this book on Computational Intelligence Systems—Leontina Di Cecco from Springer, the members of the Programme and Organising Committees, the plenary speakers, the authors and the presenters of papers.

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