Call for Papers

2014 IEEE Symposium on Computational Intelligence in Dynamic and Uncertain Environments (IEEE CIDUE'2014)

December 9-12, 2014, Orlando, Florida, USA

IEEE CIDUE'2014 will be held simultaneously with over 20 other symposia and workshops in one location at the IEEE Symposium Series on Computational Intelligence 2014 (IEEE SSCI 2014). This international event promotes all aspects of the theory and applications of computational intelligence. Sponsored by the IEEE Computational Intelligence Society, this event will attract top researchers, professionals, practitioners and students from around the world. The registration to SSCI 2014 will allow participants to attend all the symposia, including the complete set of the proceedings of all the meetings, coffee breaks, lunches, and the banquet.

Scope

IEEE CIDUE'2014 aims to bring together all researchers, practitioners and students to present and discuss the latest advances in the field of Computational Intelligence (CI), such as neural networks and learning algorithms, fuzzy systems, evolutionary computation and other emerging techniques for dealing with uncertainties encountered in evolutionary optimization, machine learning and data mining. Topics of the interest include but are not limited to:

- Evolutionary computation in dynamic and uncertain environments
  - Use of surrogates for single and multi-objective optimization
  - Search for robust solutions over space and time
  - Dynamic single and multi-objective optimization
  - Handling noisy fitness functions
  - Learning and adaptation in evolutionary computation

- Learning in non-stationary and uncertain environments
  - Incremental and lifelong learning
  - Online and interactive learning
  - Dealing with catastrophic forgetting
  - Active and autonomous learning in changing environments
  - Ensemble techniques
  - Multi-objective learning
  - Learning from severely unbalanced data, including multiclass unbalanced data.

- Mining of temporal patterns
  - Temporal data mining techniques and methodologies
  - Incorporating domain knowledge for efficient temporal data mining
  - Scalability of temporal data mining algorithms
  - Mining of temporal data on the web

- Hybrid methodologies for dealing with uncertainties, interactions of evolution and learning in changing environments, benchmarks, performance measures, and real-world applications

Important Dates:

15 June 2014	Paper submissions due
5 September 2014	Notification to authors
5 October 2014	Camera-ready papers due

Program Chairs:

Yaochu Jin, University of Surrey, UK. Email: yaochu.jin@surrey.ac.uk
Robi Polikar, Rowan University, USA. Email: polikar@rowan.edu
Shengxiang Yang, Brunel University, UK. Email: shengxiang.yang@brunel.ac.uk