The 2014 10th International Conference on Natural Computation
The 2014 11th International Conference on Fuzzy Systems and Knowledge Discovery
19-21 August 2014, Xiamen, China

http://icnc-fskd.xmu.edu.cn/

Call for Papers

The 2014 10th International Conference on Natural Computation (ICNC 2014) and the 2014 11th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2014) will be jointly held from 19-21 August 2014 in Xiamen, China. With a pleasant subtropical climate, Xiamen is known as one of the most beautiful and liveable cities in China. Famous attractions include Gulangyu Island (credited as a “garden on the sea”, “architecture exhibition of ten thousand nations”, “hometown of music” and “island of piano”), Hulishan Fortress (Guinness World Records on the biggest and smallest cannons), and South Putuo Temple. Excursions may be made to Fujian Tulou, UNESCO World Heritage Sites of fortified dwellings housing up to 80 families.

As with the past ICNC-FSDK conferences, all papers in conference proceedings will be submitted to both EI Compendex and ISTP (ISI Proceedings), as well as IEEE Xplore (all previous ICNC-FSDK conferences from 2005 to 2012 have been indexed in EI Compendex). Extended versions of selected best papers will appear in ICNC-FSDK special issues of Knowledge-Based Systems (Impact Factor: 4.104) and Neural Processing Letters (Impact Factor: 1.240). ICNC-FSDK 2014 is technically co-sponsored by the IEEE Circuits and Systems Society (pending).

ICNC-FSDK is a premier international forum for scientists and researchers to present the state of the art of data mining and intelligent methods inspired from nature, particularly biological, linguistic, and physical systems, with applications to computers, circuits, systems, control, robotics, communications, and more. This is an exciting and emerging interdisciplinary area in which a wide range of theory and methodologies are being investigated and developed to tackle complex and challenging problems. The registration fee of US$410 includes proceedings, lunches, dinners, banquet, coffee breaks, and all technical sessions.

Submissions of papers describing original work in, but not limited to, the following topics are enthusiastically encouraged.

**ICNC**
- **Neural Computation** - Learning algorithms, Neural network architectures, Feed forward & recurrent networks, Neurodynamics, Statistical neural models, Cellular neural networks, Support vector machines, Principal and independent component analysis, Self-organizing maps.
- **Evolutionary Computation** – Genetic and evolutionary algorithms, Ant colony optimization, Particle swarm optimization, Multi-objective optimization, Artificial life, Evolutionary intelligent agents, Artificial Immune systems.
- **Other Types in Nature-Inspired computation** – Fuzzy Systems, Heuristics and metaheuristics, Quantum computing, Molecular & DNA computing, Membrane computing.
- **Information Technology for Natural Computation** - Data engineering, Signal processing and multimedia, Communications and networking, Software engineering, Automation, robotics, and control, Distributed systems and computer hardware.

**FSKD**
- **Fuzzy Applications** - Fuzzy data analysis, Fuzzy image, speech and signal processing, vision and multimedia, Fuzzy control and robotics, Fuzzy hardware and architectures, Fuzzy systems and the internet, Fuzzy optimization and modeling, Fuzzy decision and support.
- **Knowledge Discovery Foundations -** Association rules, Classification, Clustering, Privacy preserving mining, Statistical methods, Parallel/ Distributed data mining, KDD Process and human interaction, Knowledge management, Knowledge visualization, Reliability and robustness.
- **Knowledge Discovery in Specific Domains** - Big data, High dimensional data, Temporal data, Data streaming, Scientific databases, Semi-structured/unstructured data, Multimedia, Text, Web and the Internet, Graphic model discovery, Software warehouse and software mining.

**Applications and Hybrid Systems**

**Keynote Speakers**
- Hamido Fujita, Iwate Prefectural University, Editor-in-Chief of Knowledge-based system, Elsevier
- Roman Slowinski, Poznan University of Technology, Coordinating Editor of European Journal of Operational Research, Elsevier
- Kay Chen Tan, National University of Singapore, Editor-in-Chief of IEEE Computational Intelligence Magazine (CIM), IEEE
- Frans Coenen, University of Liverpool, Professor and Deputy Head of Department of Computer Science

**Organizing Committee**

**General Chairs:**
- Jun Li, Defu Zhang, Xiamen University, China

**ICNC’14 PC Chair:**
- Xiong Ning, Mälardalen University, Sweden

**FSKD’14 PC Chair:**
- Maozhen Li, Brunel University, UK

**Organizing:**
- Yunqi Lei, Xiamen University, China

**Committee Chairs:**
- Lipo Wang, Nanyang Technological University, Singapore

**Publication Chair:**
- Shuihua Han, Xiamen University, China

**Publicity Chairs:**
- Dundong Liu, Wexing Hong, Xiamen University, China

**Deadlines**
- Paper Submission: 25 January 2014
- Review Decision Notification: 10 March 2014
- Author Registration & Final Paper: 10 April 2014

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Prospective authors are invited to submit manuscripts written in English. All submissions will be peer-reviewed by experts in the field based on originality, significance, quality and clarity. Authors should use the Latex style files or MS-Word templates obtained from the conference site to format their papers. Authors should submit PDF files of their manuscripts via the online submission system. Submissions imply that the papers have not been submitted elsewhere and will not be submitted elsewhere for publications before the review decisions of this conference.