CALL FOR PAPERS

Software Engineering with Computational Intelligence and Machine Learning

10th Anniversary Special Session

at the 24th International Conference on Software Engineering and Knowledge Engineering

July 1-3, 2012
Hotel Sofitel, Redwood City, San Francisco Bay, USA

(http://www.ksi.edu/seke/seke12.html)

The constantly evolving technological infrastructure presents a daunting challenge of the development and assurance of software systems with increasing size and complexity. Software engineers and project managers are striving to address various problems observed during the different phases of the software development life cycle. However, though related research has seen the development of some important and useful software engineering paradigms, their technology-transfer on a larger scale has been extremely gradual. The recent emergence of computational intelligence techniques in software engineering has opened doors for exploiting the currently developed and mature techniques of fuzzy logic, artificial neural networks, case-based reasoning, machine learning, knowledge-based systems, evolutionary computing, and expert systems (http://www.seciml.ualberta.ca).

This 10th anniversary special session will focus on the current research trends in the fusion of the computational intelligence, machine learning, and software engineering domains. The topics of particular interest to the session include but are not limited to:

- Search Based Software Engineering
- Fuzzy Logic
- Artificial Neural Networks
- Case-Based Reasoning
- Knowledge- and Rule-Based Systems
- Evolutionary Computing
- Hybrid Intelligent Systems
- Machine Learning and Data Mining
- Software Requirements and Specifications
- Software Cost and Effort Estimation
- Agent-Oriented Software Engineering
- Formal Methods
- Software Measures and Soft Computing
- Software Testing
- Software Verification and Validation
- Software Quality and Reliability Estimation
- Quality of Software Measurement Data
- Context-aware Software Systems
- Autonomic Systems
- Web-based Systems
- Social Networks
Submitted papers must not be previously published or be under consideration for publication elsewhere. Authors must adhere to all submission procedures of the 24th SEKE 2012, including deadlines and paper format. In addition to submitting papers via the 24th SEKE 2012 web site (see above for address), authors are required to submit a copy of their paper(s) by email to Taghi M. Khoshgoftaar and Marek Reformat on or before March 01, 2012 (the deadlines will follow any changes in the SEKE deadlines).

All papers accepted for the Special Session will be published in the proceedings of the SEKE 2012 conference. The Special Session papers are considered as papers submitted to SEKE 2012, and they undergo the same review process.

We plan to publish special issues from selected papers accepted for presentation. There will be special issues of The International Journal of Software Engineering and Knowledge Engineering (http://www.worldscinet.com/ijseke/ijseke.shtml), and other international journal dedicated to software as well as computation intelligence.

**Important Dates:**

- Paper submission deadline: March 1, 2012
- Notification of acceptance: April 20, 2012
- Camera-ready due, and conference registration: May 10, 2012
- Conference: July 1-3, 2012

**Organizers:**

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