

## **Special Session Title: Data Mining in Industrial Applications**

### **Special session objectives and topics**

The increasing interests of data mining in many industrial applications have resulted in a considerable body of technologies for analyzing large amounts of data - numerical, image, text, graph, audio and video data. Data mining technologies have generated large impacts in manufacturing, engineering diagnostics, marketing, financial forecasting, product development, power management, etc. Computational Intelligence techniques are ideally placed for developing effective data mining algorithms.

The objective of this special session in IEEE SSCI 2013 is to provide an open forum for meeting and exchanging research ideas among researchers and engineers from industry and academia on solving industrial problems using data mining technologies, presenting new data mining technologies developed using computational intelligence to discover knowledge from big data, and to facilitate the fast transfer of technology from research labs into commercial products by demonstrating data mining systems developed for solving real-world problems.

Submissions to the Special Session should be centered on theoretical results or applications of computational intelligence to the Digital Economy. Specific topics for the special session include but are not limited to:

- Data Mining for Logistic and Supply Chain Management
- Multimedia data mining for marketing
- E-Commerce (Mining Logfiles, Behavioral Targeting)
- Mining multi-channel time series signals for Classification & Prediction
- Data mining for Deviation and Novelty Detection
- Goodness Measures and Evaluation (e.g. false discovery rates)
- Visualization of high dimensional data
- Frequent Pattern Mining
- Learning and Adaptive Control
- Learning/Adaption of Recognition and Perception
- Time Series and Sequential Pattern Mining
- Data mining algorithms and systems for industrial applications including engineering fault diagnostics, energy industry, market forecast, real-time multi-channel monitoring systems, business intelligence

Organizers:

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