Call for Papers

The Fifth International Conference on Rough Sets and Current Trends in Computing (RSCTC'2006)

"Towards new paradigms in reasoning about data"

International Conference Center, Kobe, Japan

URL: http://rsctc2006.med.shimane-u.ac.jp/

November 6-8, 2006

Rough set theory, proposed by Zdzislaw Pawlak in 1982, has been attracting researchers and practitioners in various fields of science and technology. The interest in rough set theory and applications is remarkable since the beginning, and it is still growing. The ingenious concepts of rough set have been a base for original developments in both theoretical research, including logics, algebra and topology, and applied research, including knowledge discovery, data mining, decision theory, artificial intelligence and approximate reasoning. The latter led to many real life applications in diversified areas such as medicine, bioinformatics, economy, finance, political analysis, chemistry, engineering, environment, and even art and culture. Since the rough set concept handles a specific type of data “imperfection” related to granularity of information, it is complementary to other concepts used for handling data “imperfection” such as fuzzy sets, Bayesian reasoning, neural networks, evolutionary algorithms, statistics and logical analysis of data. This complementarity is exploited in hybrid approaches improving the performance of data analysis tools.

The biannual international conference on Rough Sets and Current Trends in Computing (RSCTC) provides state-of-the-art in rough set theory and its applications. It is intended to bring together researchers and practitioners from universities, laboratories and industry, to facilitate dialogue and cooperation.

Conference History:
RSCTC is an outgrowth of a series of annual International Workshops devoted to the subject of rough sets, started in Poznan, Poland in 1992, and then held alternatively in Canada, the USA, Japan and China (RSKD, RSSC, RSFDGrC, RSGrC series).

The first RSCTC conference was held in Warsaw, Poland in 1998. It was followed by successful RSCTC conferences in Banff, Canada (2000), in Malvern, U.S.A. (2002) and in Uppsala, Sweden (2004).

Aim and Scope:
The aim of RSCTC'2006 is to provide researchers and practitioners interested in new information technologies an opportunity to highlight innovative research directions, novel applications, and a growing number of relationships between rough sets and such areas as computational intelligence, knowledge discovery and data mining, intelligent information systems, web
mining, synthesis and analysis of complex objects and non-conventional models of computation. Relevant topics include, but are not limited to:

Rough set theory and applications
Fuzzy set theory and applications
Fuzzy-rough, rough-fuzzy and beyond
Knowledge discovery and data mining
Machine learning
Approximate and uncertain reasoning
Bioinformatics
Case-based reasoning
Complexity aspects of soft computing
Computational intelligence
Computing with words
Decision support systems
Evolutionary computing
Granular computing
Hybrid and integrated intelligent systems
Intelligent information systems
Kansei engineering
Logical aspects of soft computing
Multi-agent systems
Multi-criteria decision support
Neural networks
Non-classical logic
Pattern recognition and image processing
Petri nets and concurrency
Soft computing
Spatial reasoning
Statistical inference
Web intelligence

Invited Speakers:

Keynote Speakers: Professor Zdzislaw Pawlak
Professor Lotfi A. Zadeh

Plenary Speakers and Tentative Titles:

Professor Didier Dubois
“Bipolar representations in reasoning, knowledge extraction and decision processes”

Professor Mitsuo Nagamachi
“Implications of rough sets applied to the kansei engineering”

Professor Wojciech Ziarko
“Stochastic approach to rough set theory”

Paper Submission:
Both research and application papers are solicited. All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity. Please submit your paper by April 30, 2006, via our electronic paper submission system. The paper submission system for RSCTC 2006 is opened from February 6, 2006. Please check the conference web page, http://rsctc2006.med.shimane-u.ac.jp for possible updates.

Your draft paper should have no more than ten (10) pages in the LNCS style, including figures, tables and references. Please read the Information for
Authors and use the style files for Proceedings and Other Multi-Author Volumes supplied by Springer-Verlag regarding LNCS. Springer-Verlag author instructions are available at:

http://www.springeronline.com/sgw/cda/frontpage/0,11855,5-164-2-72376-0,00.html

**Publication:**
The conference proceedings will be published as a volume of LNCS/LNAI series from Springer.

**Session Proposal:**
Session proposals will be welcome. One session should be composed of 5-6 papers. All papers in the proposed sessions will be reviewed in the same way as normal papers.

**Important Dates:**
- Paper submission site open: February 6, 2006
- Full paper submission: April 30, 2006
- Acceptance notices: June 15, 2006
- Camera-ready papers: July 15, 2006
- Conference: November 5-8, 2006.

**Registration fee:**

<table>
<thead>
<tr>
<th>Categories</th>
<th>early registration (before July 31, 2006)</th>
<th>Normal registration (after July 31, 2006)</th>
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<tbody>
<tr>
<td>Regular</td>
<td>45,000 JPY</td>
<td>55,000 JPY</td>
</tr>
<tr>
<td>Student</td>
<td>35,000 JPY</td>
<td>45,000 JPY</td>
</tr>
</tbody>
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(1 USD ≅ 115 JPY on January 25, 2006)

The regular registration fee includes participation in all sessions, refreshment breaks, conference proceedings, one ticket for the welcome reception and one ticket for the dinner cruise. The student registration fee includes participation in all sessions, refreshment breaks, conference proceedings and one ticket for the welcome reception. The student registration fee applies to students who can provide an official letter or other formal documentation confirming current full-time student status at registration desk. All registration fee should be paid in JPY.

**Organization**

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Professor Zdzislaw Pawlak, Polish Academy of Sciences, Poland
Professor Lotfi Zadeh, University of California, Berkeley, U.S.A.

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Sponsors (decided):
- Kayamori Foundation of Informational Science Advancement
  http://www.kayamorif.or.jp/ (Japanese only)
- MDAI2005 (The second International Conference on Modeling Decisions for Artificial Intelligence)
  http://www.mdai.info/mdai2005/

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