
Call for papers: A Special Session in RSKT'2011:

Decision-theoretic Rough Set Model and Applications

Banff, Canada, October 9-12, 2011



The Sixth International Conference on Rough Sets and Knowledge Technology
RSKT 2011 will be held in Banff, Canada, October 9-12, 2011. Website:
<http://rskt.cs.uregina.ca/>.

You are welcome to submit a paper to a special session in RSKT'11 titled "**Decision-theoretic Rough Set Model and Applications**". All accepted papers will be published in the conference proceedings by **Springer-Verlag** in the Lecture Notes in Artificial Intelligence (LNAI) series, which is published, in parallel to the printed books, in full-text electronic form via <http://www.springerlink.com> (pending approval). Post conference papers are planned for journals such as **Fundamenta Informaticae(FI)**, **Transactions on Rough Sets(TRS)** and the **International Journal of Computational Intelligence Systems (IJCIS)**. The details of the special session are described as follows.

Special Session on **Decision-theoretic Rough Set Model and Applications**

Brief Description

The Decision-theoretic Rough Set Model and Applications in the Sixth International Conference on Rough Sets and Knowledge Technology (RSKT 2011) invites the submission of original and unpublished research papers. This special session aims to bring together researchers and practitioners in the field of Decision-theoretic Rough Set Model (DTRSM) and its applications in decision-making. DTRSM is a typical probabilistic rough set model, in which Bayesian theory is introduced to minimize the risks of classification. It can be regarded as a generalized rough set model, from which Pawlak rough set model, alpha-cut fuzzy set model, 0.5 probabilistic model and variable precision rough set model can be derived. A broad scope of research on the DTRSM will contribute to a better understanding on the essentials of rough set theory and effective applications in decision theory. In recent work, the DTRSM has been successfully used for decision analysis, decision making, information filtering, Web-based support systems, attribute reduction, multi-criteria classification and multi-view decision models. The Special Session will encourage all research work related to DTRSM theory and its applications.

Scope and Topics

Topics of this session focus on the following fields (but not limited to):

- Probabilistic rough set model
- Bayesian rough set model
- Game-theoretical rough sets
- Risk analysis in Decision-theoretic rough set model
- Reduct theory and decision-theoretic rough sets
- Theoretical foundations of decision-theoretic rough sets
- Game theory and decision-theoretic rough sets
- Decision support systems (DSS) based on decision-theoretic rough sets
- DTRSM-based rule induction
- DTRSM-based data mining
- DTRSM in incomplete information systems
- Decision-making based on decision-theoretic rough sets
- Approximation reasoning based on decision-theoretic rough sets

Important Dates

Submission of full papers	March 20, 2011
Notification of acceptance	May 20, 2011
Camera-ready paper	July 6, 2011
Conference dates	October 9-12, 2011

Instructions for Authors

All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity. Each paper should have no more than ten (10) pages in the Springer-Verlag LNCS style, including figures, tables and references. Springer-Verlag author instructions are available at: <http://www.springer.com/lncs>.

Please specify that the paper is for the **Decision-theoretic Rough Set Model and Applications session**, and submit your paper in PDF format by March 20, 2011 via our electronic paper submission system. **The URL for paper submission system is:**

<https://www.easychair.org/account/signin.cgi?conf=rskt11>.

The same electronic copy must also be submitted to the organizer of the special session: huaxiongli@nju.edu.cn.

This session is organized by Nanjing University, China, Chongqing University of Posts and Telecommunications, China, Southwest Jiaotong University, China and University of Regina, Canada. For more information please contact *Dr. Xianzhong Zhou* at zhouxz@nju.edu.cn, *Dr. Hong Yu* at yuhongcq@yahoo.com.cn, *Dr. Dun Liu* at newton83@163.com, *Dr. Huaxiong Li* at huaxiongli@nju.edu.cn and *Dr. Joseph Herbert* at herbertj@cs.uregina.ca.