# **CFP: A Special Session in JRS2013**

## **Covering-Based Rough Set and Its Application**



Halifax, Canada, October 11-14, 2013

Session Co-Chairs: William Zhu, Fan Min

A joint conference of the 14th International Conference on Rough Sets, Fuzzy Sets, Data Mining and Granular Computing (RSFDGrC 2013) and the 8th International Conference on Rough Sets and Knowledge Technology (RSKT 2013) will be held in Halifax, Nova Scotia, Canada, Oct 11-14, 2013. You are welcome to submit a paper to the special session titled "Covering-Based Rough Set and Its Application."

## **Brief description**

Covering-based rough set is an extension to classical rough set to deal with the vagueness, incompleteness and granularity of knowledge. In the past decade, this theory has attracted much research interest. Some theoretical aspects have been explored, and some axiomatization works have been undertaken. There are, however, many important issues to address to enrich this theory and make it more applicable to real life data.

Currently, there are a number of research trends of this theory. For example, combination with other theories such as fuzzy set and topology; application to data mining problems such as clustering and classification; application to image processing systems, clinic systems and hydrology systems. This motivates the special session of "covering-based rough set and its application" at the 2013 Joint Rough Set Symposium (http://cs.smu.ca/jrs2013/).

The special session aims at bringing researchers and practitioners to exchange latest ideas and to envision the future of covering-based rough set. Participants of the special session have an excellent opportunity to interact with other researchers in rough set and knowledge technology.

### **Topics of interest**

The topics include, but are not limited to

- Covering-based rough set
  - 1. Axiomatization
  - 2. Approximations
  - 3. Knowledge redundancy
  - 4. Neighborhood systems
- Covering-based rough set related to
  - 1. Fuzzy set
  - 2. Matroid theory
  - 3. Information theory
  - 4. Lattice theory
  - 5. Topology
  - 6. Graph theory
  - 7. Other theories
- Covering-based rough set application to
  - 1. Databases
  - 2. Knowledge-based systems
  - 3. Cost-sensitive learning

All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity. Accepted papers will be published in the main conference proceedings. Selected papers will be extended and published in several international journals after the conference.

### **Important Dates**

Electronic submission of full papers	May 10, 2013
Notification of paper acceptance	June 20, 2013
Camera-ready of accepted papers	July 15, 2013
Conference	October 11-14, 2013

#### **Instructions for Authors**

All submitted papers will be reviewed on the basis of technical quality, relevance, significance, and clarity. Normal length papers should be between 8 and 10 pages, formatted in Springer's single column format, including figures, tables and references.

Springer-Verlag author instructions are available at: <a href="http://www.springer.com/lncs">http://www.springer.com/lncs</a>

Selected papers will be extended and published in several special issues of SCI indexed journals after the conference. The same electronic copy must also be submitted to: <a href="mailto:minfanphd@163.com">minfanphd@163.com</a>.

Please specify that the paper is for the Covering-Based Rough Set and Its Application, and submit your paper in PDF format by May 10, 2013 via our electronic paper submission system. The URL for paper submission system is: <a href="https://www.easychair.org/account/signin.cgi?conf=jrs2013">https://www.easychair.org/account/signin.cgi?conf=jrs2013</a>

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