3rd International Workshop on Knowledge Discovery from Sensor Data
(SensorKDD-2009)
June 28th, 2009
Paris, France
SensorKDD-2009 Theme: Climate change, Energy assurance, and Infrastructural impacts
Workshop URL: http://www.ornl.gov/sci/knowledgediscovery/SensorKDD-2009/

In conjunction with ACM SIGKDD International Conference on
Knowledge Discovery and Data Mining (KDD-09)
June 28th - July 1st, 2009
Paris, France

CALL FOR PAPERS

Important dates
* April 20, 2009: Submission of Full Papers
* May 10, 2009: Author notification
* May 25, 2009: Submission of Camera-ready papers (ACM hard deadline)
* June 28, 2009: Full-day Workshop at ACM SIGKDD Conference, Paris, France

Brief Description
Wide-area sensor infrastructures, remote sensors, RFIDs, and wireless sensor networks yield massive volumes of disparate, dynamic, and geographically distributed data. As such sensors are becoming ubiquitous, a set of broad requirements is beginning to emerge across high-priority applications including adaptability to climate change, disaster preparedness and management, national or homeland security, and the management of critical infrastructures. The raw data from sensors need to be efficiently managed and transformed to usable information through data fusion, which in turn must be converted to predictive insights via knowledge discovery, ultimately facilitating automated or human-induced tactical decisions or strategic policy based on decision sciences and decision support systems.

The challenges for the knowledge discovery community are expected to be immense. On the one hand, dynamic data streams or events require real-time analysis methodologies and systems, while on the other hand centralized processing through high end computing is also required for generating offline predictive insights, which in turn can facilitate real-time analysis. The online and real-time knowledge discovery imply immediate opportunities as well as intriguing short- and long-term challenges for practitioners and researchers in knowledge discovery. The opportunities would be to develop new data mining approaches and adapt traditional and emerging knowledge discovery methodologies to the requirements of the emerging problems. In addition, emerging societal problems require knowledge discovery solutions that are designed to investigate anomalies, hotspots, changes, extremes and nonlinear processes, and departures from the normal. The theme for the SensorKDD-2009 workshop will be around three inter-related global priorities: *climate change, energy assurance, and infrastructural impacts*. **While authors will be strongly encouraged to submit all papers which may be of potential interest to the SensorKDD community, we will also solicit submissions from authors who may be new to this community but have an interest in contributing to this year's theme.**

Suggested Topics
This workshop seeks to bring together researchers from academia, government and the private sector to facilitate cross-disciplinary exchange of ideas in the area of knowledge discovery from sensors and streams. Interested authors should submit high quality research papers using the standard ACM format found http://www.acm.org/sigs/publications/proceedings-templates in MS Word or PDF format as an email attachment to SensorKDD@gmail.com. Papers, accepted for presentation at the workshop will be published in the workshop proceedings. In addition, selected best papers will be invited for publication in a leading International journal

(check workshop web page for periodic updates). All submitted papers will be refereed for quality and originality by the Program Committee. The major topics of the workshop include but are not limited to:

Workshop Chairs
- Dr. Olufemi A. Omitaomu, Oak Ridge National Laboratory, Oak Ridge, TN, USA.
- Dr. Auroop R. Ganguly, Oak Ridge National Laboratory, Oak Ridge, TN, USA.
- Prof. Joao Gama, University of Porto, Rua de Ceuta, Porto, Portugal.
- Dr. Ranga Raju Vatsavai, Oak Ridge National Laboratory, Oak Ridge, TN, USA.
- Prof. Mohamed Medhat Gaber, Monash University, Australia.
- Prof. Nitesh V. Chawla, University of Notre Dame, IN, USA.

Program Committee
For a partial list of program committee members please visit the SensorKDD-2009 website at http://www.ornl.gov/sci/knowledgediscovery/SensorKDD-2009/.