SDM 2011 http://www.siam.org/meetings/sdm11 **Eleventh SIAM International Conference on Data Mining**

April 28th – April 30st 2011, Phoenix, Arizona, USA

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2011 SIAM International Conference on Data Mining April 28-30. Phoenix, Arizona

Data mining is an important tool in science, engineering, industrial processes, healthcare, business, and medicine. The datasets in these fields are large, complex, and often noisy. Extracting knowledge requires the use of sophisticated, highperformance and principled analysis techniques and algorithms, based on sound theoretical and statistical foundations. These techniques in turn require implementations that are carefully tuned for performance; powerful visualization technologies; interface systems that are usable by scientists, engineers, and physicians as well as researchers; and infrastructures that support them.

This conference provides a venue for researchers who are addressing these problems to present their work in a peer-reviewed forum. It also provides an ideal setting for graduate students and others new to the field to learn about cutting-edge research by hearing outstanding invited speakers and attending presentations and tutorials (included with conference registration). A set of focused workshops are also held on the last day of the conference. The proceedings of the conference are published in archival form, and are also made available on the SIAM web site.

Methods and Algorithms

- Classification
- Clustering
- Frequent Pattern Mining
- Probabilistic & Statistical Methods
- Spatial & Temporal Mining
- Data Stream Mining •
- Abnormality & Outlier Detection
- Feature Selection/ Feature Extraction Automation & Process Control
- Dimension Reduction •
- Data Reduction
- Mining with Constraints •
- Data Cleaning & Noise Reduction
- Computational Learning Theory
- Multi-Task Learning
- Adaptive Algorithms
- Scalable & High-Performance Mining
- Mining Graphs
- Mining Semi structured Data
- Mining Complex Datasets
- Mining on Emerging Architectures •
- Text & Web Mining
- Other Novel Methods

Applications

- Astronomy & Astrophysics
- High Energy Physics
- Collaborative Filtering

WORKSHOPS AND TUTORIALS

The conference will feature workshops and tutorials on several special topics. Please see the SDM 2011 website for submission requirements. Examples of workshops and tutorials are available through the SDM 2010 website (http://www.siam.org/meetings/sdm10/).

TOPICS OF INTEREST

- Earth Science
- Risk Management
- Supply Chain Management
- Customer Relationship Management
- Finance
- Genomics & Bioinformatics
- Drug Discovery
- Healthcare Management
- Logistics Management
- Intrusion & Fraud detection
- Bio-surveillance
- Sensor Network Applications
- Social Network Analysis
- Intelligence Analysis
- Other Novel Applications & Case Studies

Human Factors and Social Issues

- Ethics of Data Mining
- Intellectual Ownership
- Privacy Models
- Privacy Preserving Data Mining & Data Publishing
- Risk Analysis
- User Interfaces
- Interestingness & Relevance
- Data & Result Visualization

IMPORTANT DATES

Paper Submission:

11:59pm, October 15, 2010 (PST)

Author Notification: December 22, 2010

Workshop/Tutorial Proposals: 11:59pm, October 15, 2010 (PST)