CIDU

Conference on Intelligent Data Understanding

Boulder, CO – Oct 24-26, 2012

Call for Papers

The 2012 Conference on Intelligent Data Understanding (CIDU 2012) is organized under the theme of ***Bringing Data and Models Together*** and will attract top researchers and practitioners in the field of data mining focusing on applications to Earth & Environmental Systems, Space Science, and Aerospace & Engineering Systems. The Organizing Committee is soliciting theme-oriented papers that advance one of these areas through the use of data mining, machine learning, or computational intelligence techniques. We invite papers that include a clear link between the domain and analysis methods, and papers that give perspectives on methods to bring data-driven and model-based methods together are particularly sought. We also invite submission of 2-page extended abstracts for posters reporting new and interesting results, ideas, or work-in-progress.

All papers and posters will be peer-reviewed based on technical merit, significance, originality, relevance, and clarity. Papers should be no more than 8 pages in two-column format and describe original work not previously published in a refereed conference or journal. The CIDU proceedings will be indexed by IEEE Xplore and DBLP. Selected papers will be invited to be extended for consideration in the journal Statistical Analysis & Data Mining.

Key Dates

Paper Submissions Due: June 4, 2012
Acceptance Notification: Aug 3, 2012
Camera-Ready Papers Due: Aug 17, 2012
Poster Abstracts Due: Aug 10, 2012
Poster Decision Notification: Aug 24, 2012

Organizing Committee

General Chairs:
Nitesh V. Chawla, University of Notre Dame
Ashok N. Srivastava, NASA Ames Research Center
Area Chairs:
Earth & Environmental Systems – John Williams, National Center for Atmospheric Research
Space Science – Michael J. Way, NASA Goddard Institute for Space Studies – Space Science
Aerospace & Engineering Systems – Maxime Gariel, Rockwell Collins Control Technologies
NESC Chair:
Robert Beil, NASA Engineering and Safety Center
Poster Chair:
Kanishka Bhaduri, Netflix Inc.
Proceedings Chair:
Kamalika Das, SGT/NASA Ames Research Center
Awards Chair:
Nikunj Oza, NASA Ames Research Center
Publicity & Communications Chair:
Karsten Steinhaeuser, University of Minnesota
Local Arrangements Chair:
Andrew Weekley, National Center for Atm. Research

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Topics of Interest

Methodology Papers
Algorithmic or methodological innovations that are relevant to one or more application areas or hold such potential. We also invite papers with a data visualization component.

Earth & Environmental Systems
- Climate, weather and ecology data sciences
- Climate modeling
- Geographic information systems
- Geospatial intelligence
- Spatio-temporal data mining
- Forecasting and decision support

Space Science
- On-board and real-time machine learning
- Decision making under uncertainty
- Constraint-driven data mining and learning
- Event mining and robotic telescopes
- Un/supervised learning in astrophysics
- Classification in large sky surveys

Aerospace & Engineering Systems
- Systems health applications
- Anomaly detection for large datasets
- Text mining in aerospace information systems
- Data driven reliability modeling
- Adaptive system monitoring
- Exploratory mining of aerospace data
- Privacy & security issues in aerospace data
- Statistical process control
- Real-time prediction and decision support

https://c3.nasa.gov/dashlink/events/1/ | CIDUChairs@gmail.com