



SOCIAL DATA MINING AND KNOWLEDGE BUILDING

● November 5 – November 9, 2007

ORGANIZING COMMITTEE: PETER JONES (Yale), KARIN VERSPOOR (Los Alamos), RONALD COIFMAN (Yale), JOHAN BOLLEN (Los Alamos), ANDREW McCALLUM (University of Massachusetts - Amherst)

Scientific Overview

Social Data Mining is a fast-growing and exciting area of inquiry, in which connections among and interactions between individuals are analyzed to understand innovation, collective decision making, and problem solving, and how the structure of organizations and social networks impacts these processes. Analysis of such inherently relational datasets is currently being applied in e-commerce to drive recommendation systems, in bibliometrics to describe patterns of publication and determine the influence of specific individuals, in security environments to understand the structure of terrorist or gang networks, and numerous other areas. This workshop will bring together researchers in mathematics, computer science, and the social sciences to explore the following topics:

- Collective decision making
- Social network analysis
- Social mapping and bibliometrics
- The role of information visualization in understanding social networks
- The application of graph-theoretical analysis to social networks
- Data representation strategies, e.g. the Semantic Web

Confirmed Speakers

Edo Airoidi (Princeton University), **Luis Bettencourt** (LANL), **Johan Bollen** (LANL), **Kevin Boyack** (SciTech Strategies, Inc.), **James Bremer** (UC Davis), **Inderjit Dhillon** (University of Texas at Austin), **Leo Egghe** (Universiteit Hasselt), **Tina Eliassi-Rad** (LANL), **Santo Fortunato** (ISI Foundation), **Pranam Kolari** (University of Maryland Baltimore County), **Michael Kurtz** (Harvard-Smithsonian Center for Astrophysics), **Edo Liberty** (Yale University), **Andrew McCallum** (University of Massachusetts Amherst), **Filippo Menczer** (Indiana University), **Muthu Muthukrishnan** (Rutgers University), **Dragomir Radev** (University of Michigan), **Raghu Ramakrishnan** (Yahoo! Research), **Jose Ramasco** (ISI Foundation), **Luis Rocha** (Indiana University), **Karin Verspoor** (LANL), **Johan Walden** (UC Berkeley), **Stanley Wasserman** (Indiana University), **Eric Xing** (CMU)

Long Program Schedule

This workshop is part of the long program “**Mathematics of Knowledge and Search Engines.**”

- Tutorials, September 11-20, 2007
- Workshop 1: Dynamic Searches and Knowledge Building, October 1 - 5, 2007
- Workshop 2: Numerical Tools and Fast Algorithms for Massive Data Mining, Search Engines and Applications, October 22 - 26, 2007
- **Workshop 3: Social Data Mining and Knowledge Building, November 5 - 9, 2007**
- Workshop 4: Search and Knowledge Building for Biological Datasets , November 26 - 30, 2007

Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

● www.ipam.ucla.edu/programs/sews3



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