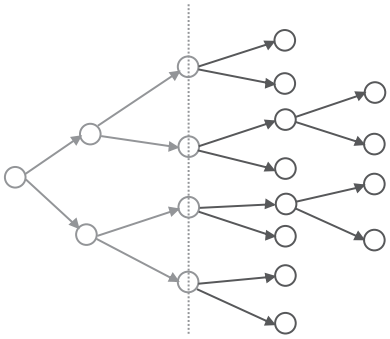
Final Program and Abstracts

2013 SIAM International Conference on DATA MINING

May 2–4, 2013



Sheraton Austin Hotel at the Capitol
Austin, Texas, USA

Sponsored by the SIAM Activity Group on Data Mining and Analytics (SIAG/DMA)

The purpose of the SIAM Activity Group on Data Mining and Analytics (SIAG/DMA) is to advance the mathematics of data mining, to highlight the importance and benefits of the application of data mining, and to identify and explore the connections between data mining and other applied sciences.

This conference is held in cooperation with the American Statistical Association.

2013 is designated as the year of Math of Planet Earth.
SIAM supports MPE2013.
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7:00 AM – 7:30 PM

Friday, May 3
7:30 AM – 3:30 PM

Saturday, May 4
7:30 AM – 4:00 PM

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- Admission to a workshop
- CD of conference proceedings, workshop and tutorial notes
- Coffee breaks daily
- Continental Breakfast daily
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- Welcome Reception and Poster Session

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Please check with the SIAM registration desk regarding the availability of job postings or visit *http://jobs.siam.org.*

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The poster session is scheduled for Thursday, May 2 at 6:30 PM. Poster presenters are requested to set up their poster material on the provided 4' x 8' poster boards in the Capitol View Terrace beginning Thursday, May 2 at 7:00 AM. All materials must be posted by Thursday, May 2 by 6:30 PM, the official start time of the session. Poster displays must be removed by Friday, May 3 by 10:00 AM. Posters remaining after this time will be discarded. SIAM is not responsible for discarded posters.

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Display copies of books and complimentary copies of journals are available on site. SIAM books are available at a discounted price during the conference. If a SIAM books representative is not available, completed order forms and payment (credit cards are preferred) may be taken to the SIAM registration desk. The books table will close at 3:30 PM on Saturday, May 4.

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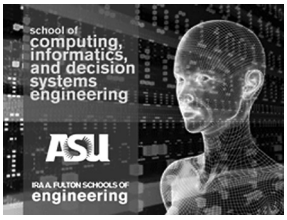

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Data Mining and Knowledge Discovery is pleased to sponsor the SIAM SDM Best Student Paper Award. This premier technical journal in data mining is published by Springer Science & Business Media, a leading publisher of scholarly books and journals.

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Comments about SIAM meetings are encouraged! Please send to:

Sven Leyffer, SIAM Vice President for Programs (*vpp@siam.org*)

Get-togethers

- Welcome Reception
  and Poster Session,
  Thursday, May 2
  6:30 PM – 9:00 PM
- Business Meeting
  (open to SIAG/DMA members)
  Complimentary wine and beer will be served.
  Friday, May 3
  6:30 PM – 7:00 PM

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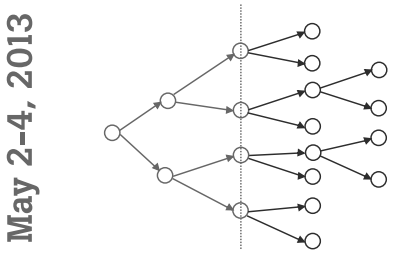
Collaborate and interact with mathematicians and applied scientists whose work involves data mining.

2013 SIAM International Conference on DATA MINING



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- Annual conference and proceedings
- Special sessions at SIAM Annual Meetings
- Website

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COST:

- $10 per year
- Student SIAM members can join 2 activity groups for free!

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Invited Plenary Speakers

* *All Invited Plenary Presentations will take place in Capitol Ballroom DE – 3rd Floor**

Thursday, May 2

8:15 AM – 9:30 AM

IP1 Regional Climate Informatics: A Statistical Perspective

Doug Nychka, *National Center for Atmospheric Research, USA*

1:30 PM – 2:45 PM

IP2 Mining Clinical Data to Build Predictive Models

Peter Szolovits, *Massachusetts Institute of Technology, USA*

Friday, May 3

8:15 AM – 9:30 AM

IP3 Modeling Individual-Level Data in the 21st Century

Padhraic Smyth, *University of California, Irvine, USA*

1:30 PM – 2:45 PM

IP4 Social Networks as Information Filters

Lada Adamic, *University of Michigan, Ann Arbor, USA*

Tutorials

Thursday, May 2

10:00 AM – 12:05 PM

TS1: Tutorial Session: Sampling and Summarization for Social Networks

Shou-De Lin, *National Taiwan University, Taiwan*

Mi-Yen Yeh, *Institute of Information Science, Academia Sinica, Taiwan*

Cheng-Te Li, *National Taiwan University, Taiwa*n

Capitol Ballroom ABC - 3rd Floor

3:00 PM – 5:05 PM

TS2: Tutorial Session: Big Data Analytics for Healthcare

Jimeng Sun, *IBM T. J. Watson Research Center, USA*

Chandan Reddy, *Wayne State University, USA*

Capitol Ballroom ABC - 3rd Floor

Friday, May 3

10:00 AM – 12:05 PM

TS3: Tutorial Session: Crowdsourcing & Human Computation:
Data Labeling & Building Hybrid Systems

Matthew Lease, *University of Texas at Austin, USA*

Capitol Ballroom ABC - 3rd Floor

3:00 PM – 5:05 PM

TS4: Tutorial Session:
Recent Advances in Applied Matrix Technologies

Fei Wang, *IBM T. J. Watson Research Center, USA*

Hanghang Tong, *IBM T. J. Watson Research Center, USA*

Capitol Ballroom ABC - 3rd Floor

Tutorials

Saturday, May 4

8:30 AM – 12:00 PM

TS5: Tutorial Session: Outlier Detection for Temporal Data

Manish Gupta, *University of Illinois at Urbana-Champaign, USA*

Jing Gao, *State University of New York, Buffalo, USA*

Charu Aggarwal, *IBM T. J. Watson Research Center, USA*

Jiawei Han, *University of Illinois at Urbana-Champaign, USA*

Capitol Ballroom ABC - 3rd Floor

1:30 PM – 5:00 PM

TS6: Tutorial Session: Online Learning for Big Data Mining: Methods and Applications

Steven C.H. Hoi, *Nanyang Technological University, Singapore*

Capitol Ballroom ABC - 3rd Floor

Full Day Workshops

Saturday, May 4

Data Mining for Medicine and Healthcare Workshop
8:30 AM – 5:00 PM
Co-Chairs:
David Gotz, *IBM T.J. Watson Research Center, USA*
Nigam Shah, *Stanford University, USA*
Gregor Stiglic, *University of Maribor, Slovenia*
Fei Wang, *IBM T.J. Watson Research Center, USA*
Capitol Ballroom D - 3rd Floor

See page 15 for schedule

Data Mining for Service and Maintenance Workshop
9:00 AM – 5:30 PM
Co-Chairs:
Nikunj Oza, *NASA AMES Research Center, USA*
Dragos Margineantu, *Boeing Research & Technology, USA*
Shipeng Yu, *Siemens Healthcare, USA*
Matan Ninio, *IBM Research Haifa, Israel*
Capitol Ballroom E– 3rd Floor

Half Day Workshops

Saturday, May 4

Analytics for Cyber-Physical Systems Workshop
8:05 AM – 12:30 PM
Co-Chairs:
Chetan Gupta, *Hewlett Packard Laboratories, USA*
Varun Chandola, *Oak Ridge National Laboratory, USA*
Ranga Raju Vatsavai, *Oak Ridge National Laboratory, USA*
Capitol Ballroom FGH - 3rd Floor

See page 17 for schedule

Reliability Aware Data Fusion in Participatory Networks Workshop
1:30 PM – 5:00 PM
Co-Chairs:
Sameep Mehta, *IBM Research India, India*
L. Venkata Subramaniam, *IBM Research India, India*
Capitol Ballroom FGH - 3rd Floor

See page 18 for schedule

Data Mining for Medicine and Healthcare

Full Day Workshop Schedule
Saturday, May 4
Capitol Ballroom D - 3rd Floor

8:30 AM – 8:35 AM

Workshop Opening

8:35 AM – 9:25 AM

Invited Talk I
Joydeep Ghosh, University of Texas - Austin, USA

9:25 AM – 10:20 AM

Classification of Clinical Data using Sequential Patterns: A case study in Amyotrophic Lateral Sclerosis
André V. Carreiro, Susana Pinto, Mamede de Carvalho, Sara C. Madeira and Cláudia Antunes

Incremental SampleBoost for Efficient Learning from Multi-Class Data Sets
Mohamed Abouelenien and Xiaohui Yuan

Discover Temporal Dynamics of Biomarkers in Predictive Modeling with Longitudinal Data
Jiayu Zhou, Jimeng Sun, Fei Wang, Jianying Hu, Shahram Ebadollahi and Jieping Ye

10:20 AM – 10:30 AM

Coffee Break

10:30 AM – 11:20 AM

Invited Talk II
Marc Suchard, University of California, Los Angeles, USA

11:20 AM – 12:00 PM

A Temporal Association Mining Method for Signaling Drug-Drug Interactions
Yanqing Ji, Hao Ying, John Tran, Peter Dews, Ayman Mansour, See Yan and R Michael Massanari

Temporal Mining of Integrated Healthcare Data: Methods, Revealings and Implications
Rui Henriques, Sílvia Moura Pina and Cláudia Antunes

12:00 PM – 1:30 PM

Lunch Break (attendees on your own)

1:30 PM – 2:20 PM

Invited Talk III
Speaker: Jimeng Sun, IBM T.J. Watson Research Center, USA

2:20 PM – 3:00 PM

Data Mining for Integrated Sensing of Multiple Wearable Body Sensors: A Healthcare Application
Gaurav Pradhan and B Prabhakaran

Multivariate Methods for Classifying Physiological Data
Patricia Ordóñez, Tom Armstrong, Tim Oates, Jim Fackler and Christoph U. Lehmann

3:00 PM – 3:15 PM

Coffee Break

3:15 PM – 4:05 PM

Invited Talk IV
Speaker: Nitesh Chawla, University of Notre Dame, USA

4:05 PM – 4:55 PM

Real-Time Digital Flu Surveillance using Twitter Data
Kathy Lee, Ankit Agrawal and Alok Choudhary

Classification and Diagnosis of Myopathy from EMG Signals
Brian Bue, Erzsébet Merényi and James Killian

Mining Hospital Admission-discharge Data to Discover the Chance of Readmission
Arian Hosseinzadeh, Aman Verma, Masoumeh Izadi, Doina Precup and David Buckeridge

4:55 PM – 5:00 PM

Best Paper and Travel Awards
Sponsored by IBM

Analytics for Cyber Physical Systems

Half Day Workshop Schedule

Saturday, May 4

Capitol Ballroom FGH - 3rd Floor

8:05 AM – 8:10 AM

Opening Remarks
Dr. Chetan Gupta, Hewlett Packard Laboratories, USA

8:10 AM – 9:00 AM

Keynote I: Fundamental Challenges in Modeling and Design Space Exploration for CPS
Professor John Baras, University of Maryland, USA

9:00 AM – 9:20 AM

Knowledge Discovery from Nuclear Reactor Simulation Data
Neeti Pokhriyal, Oak Ridge National Laboratory, USA

9:20 AM – 9:30 AM

Coffee Break

9:30 AM – 10:15 AM

Invited Talk II: NIST on CPS
Dr. Vijay Srinivasan, NIST, USA

10:15 AM – 10:35 AM

Traffic Analytics using Probabilistic Graphical Models Enhanced with Knowledge Bases
Pramod Anantharam, Wright State University, USA

10:35 AM – 10:45 AM

Break

10:45 AM – 11:30 AM

Keynote II: Title to be Announced
Alok Batra, CTO & Chief Architect, Software COE GE Global Research, USA

11:30 AM – 11:50 AM

Detection of Classes of Heart Arrhythmias Based on Heatbeat Morphology Patterns
Tony Basil, Indian Institute of Technology, Hyderabad, India

11:50 AM – 12:25 PM

Panel: Analytics Challenges in CPS
Panelists: Professor John Baras, University of Maryland, USA;
Dr. Vijay Srinivasan, NIST, USA;
Dr. Fei Wang, IBM T. J. Watson Research Center, USA;
Lin Nease, Hewlett Packard Laboratories, USA;
Hosted by Dr. R. Vatsavai, Oak Ridge National Laboratory, USA

12:25 PM – 12:30 PM

Closing Remarks
Dr. Varun Chandola, Oak Ridge National Laboratory, USA

Reliability Aware Data Fusion in Participatory Networks

Half day Workshop Schedule

Saturday, May 4

Capitol Ballroom FGH - 3rd Floor

Research Talks

Information Virtualization in the Real World

Dan Wolfson, IBM Software Group, USA

Quality-aware Large-scale Analysis of Uncertain Data

Pontus Svenson, Defence Research Agency, Sweden

QODI: An Automatic Mediator for SPARQL End-points

Daniel Miranker, University of Texas at Austin, USA

Data Stream Mining and its Applications

Latifur Khan, University of Texas at Dallas, USA

Correlation Between Turkish Stock Market and Economy News

Sadi Evren Seker, Istanbul University, Turkey

Information Fusion Based Learning for Frugal Traffic State Sensing

Raghuram Krishnapuram, IBM Research India, India

Information Quality in Information Fusion

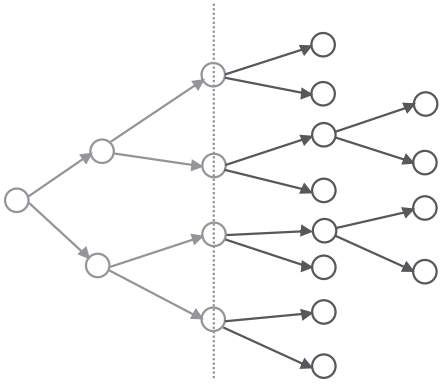
Galina Rogova, State University of New York at Buffalo, USA

Notes

SDM13 Program

2013 SIAM International Conference on DATA MINING

May 2–4, 2013



Sheraton Austin Hotel at the Capitol
Austin, Texas, USA

Wednesday, May 1

Registration

5:00 PM-7:00 PM

Room:Ballroom Foyer - 3rd Floor

Thursday, May 2

Registration

7:00 AM-7:30 PM

Room:Ballroom Foyer - 3rd Floor

Continental Breakfast

7:30 AM

Room:Ballroom Foyer - 3rd Floor

Announcements

8:00 AM-8:15 AM

Room:Capitol Ballroom DE - 3rd Floor

Thursday, May 2

IP1

Regional Climate Informatics: A Statistical Perspective

8:15 AM-9:30 AM

Room:Capitol Ballroom DE - 3rd Floor

Chair: Zhi-Hua Zhou, Nanjing University, China

As attention shifts from broad global summaries of climate change to more specific regional impacts there is a need for the data sciences to quantify the uncertainty in regional predictions. This talk will provide an overview on regional climate experiments with an emphasis on the data science problems for interpreting these large and complex simulations. Here a flexible spatial model based on fixed rank Kriging is implemented to handle a large number of spatial locations (LatticeKrig) and also include nonstationary spatial dependence.

Doug Nychka
National Center for Atmospheric Research, USA

Coffee Break

9:30 AM-10:00 AM

Room:Ballroom Foyer - 3rd Floor

Thursday, May 2

CP1

Mining with Big Data

10:00 AM-12:05 PM

Room:Capitol Ballroom D - 3rd Floor

Chair: B. Aditya Praka, Virginia Tech, USA

10:00-10:20 Fast Exact Max-Kernel Search
Parikshit Ram, Ryan Curtin and Alexander Gray, Georgia Institute of Technology, USA

10:25-10:45 Triadic Measures on Graphs: The Power of Wedge Sampling
C. Seshadhri, Ali Pinar, and Tamara G. Kolda, Sandia National Laboratories, USA

10:50-11:10 Maximal Deviations of Incomplete U-Statistics with Applications to Empirical Risk Sampling
Stephan Clémençon and Sylvain Robbiano, Télécom ParisTech, France; Jessica Tressou, INRA, France

11:15-11:35 NetSpot: Spotting Significant Anomalous Regions on Dynamic Networks
Misael Mongiovi, University of Catania, Italy; *Petko Bogdanov* and Razvan Ranca, University of California, Santa Barbara, USA; Evangelos Papalexakis, and Christos Faloutsos, Carnegie Mellon University, USA; Ambuj Singh, University of California, Santa Barbara, USA

11:40-12:00 Mining Connection Pathways for Marked Nodes in Large Graphs
Leman Akoglu, Carnegie Mellon University, USA; Jilles Vreeken, Universiteit Antwerpen, Belgium; Hanghang Tong, IBM T.J. Watson Research Center, USA; Polo Chau, Georgia Institute of Technology, USA; Nikolaj Tatti, Katholieke Universiteit Leuven, Belgium; Christos Faloutsos, Carnegie Mellon University, USA

Thursday, May 2

CP2

Mining with Uncertain and Noisy Data

10:00 AM-12:05 PM

Room:Capitol Ballroom E - 3rd Floor

Chair: Philip Kegelmeyer, Sandia National Laboratories, USA

10:00-10:20 Missing Or Inapplicable: Treatment of Incomplete Continuous-Valued Features in Supervised Learning
Pang-Ning Tan, Prakash Mandayam Comar, and Lei Liu, Michigan State University, USA; Sabyasachi Saha and Antonio Nucci, Narus Inc., USA

10:25-10:45 Patient Risk Prediction Model via Top-*k* Stability Selection
Jiayu Zhou, Arizona State University, USA; Jimeng Sun, IBM T.J. Watson Research Center, USA; Yashu Liu, Arizona State University, USA; Jianying Hu, IBM T.J. Watson Research Center, USA; Jieping Ye, Arizona State University, USA

10:50-11:10 Collective Kernel Construction in Noisy Environment
Miao Zhang, Chris Ding, and Deguang Kong, University of Texas at Arlington, USA

11:15-11:35 Mining Probabilistic Representative Frequent Patterns From Uncertain Data
Chunyang Liu, Ling Chen, and Chengqi Zhang, University of Technology, Sydney, Australia

11:40-12:00 Discriminative Feature Selection for Uncertain Graph Classification
Xiangnan Kong and Philip Yu, University of Ilinois at Chicago, USA; Xue Wang and Ann Ragin, Northwestern University, USA

Thursday, May 2

CP3

Clustering

10:00 AM-12:05 PM

Room:Capitol Ballroom FGH - 3rd Floor

Chair: Chandan Reddy, Wayne State University, USA

10:00-10:20 Determining the Number of Clusters Via Iterative Consensus Clustering
Shaina L. Race, North Carolina State University, USA

10:25-10:45 Constrained Spectral Clustering Using L1 Regularization
Jaya Kawale and *Daniel L. Boley*, University of Minnesota, USA

10:50-11:10 Efficient Anytime Density-Based Clustering
Son T. Mai, Xiao He, Jing Feng, and Christian Boehm, University of Munich, Germany

11:15-11:35 Evolutionary Soft Co-Clustering
Shuiwang Ji and *Wenlu Zhang*, Old Dominion University, USA; Rui Zhang, City College of New York, USA

11:40-12:00 Sparse Subspace Clustering Via Group Sparse Coding
Budhaditya Saha, Deakin University, Australia; Duc Son Pham, Curtin University, Australia; Dinh Phung and Svetha Venkatesh, Deakin University, Australia

Thursday, May 2

TS1

Tutorial Session:

Sampling and Summarization for Social Networks

10:00 AM-12:05 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

In this tutorial, we will introduce the state-of-the-art solutions for social network sampling and summarization, and highlight the research challenges and unsolved issues.

Shou-De Lin, National Taiwan University, Taiwan

Mi-Yen Yeh, Academia Sinica, Taiwan

Cheng-Te Li, National Taiwan University, Taiwan

Lunch Break

12:05 PM-1:30 PM

Attendees on their own

Thursday, May 2

IP2

Mining Clinical Data to Build Predictive Models

1:30 PM-2:45 PM

Room:Capitol Ballroom DE - 3rd Floor

Chair: Jennifer Dy, Northeastern University, USA

The IOM's envisioned "learning health care system," uses data from each patient to teach about prevention, diagnosis, prognosis, and treatment. Several trends will enable the realization of this goal: (1) universal electronic health records, (2) recording of clinically important details to support "meaningful use" for quality of care, (3) wearable sensors that provide real-time data on every individual, (4) the "$1000 genome" to study relations between clinical and genomic factors, and (5) "big data" techniques for analysis. With enough data, even simple machine learning techniques find strong predictive relationships. I describe our experiences predicting mortality and other important clinical risks and therapeutic opportunities for intensive care patients. Our current efforts abstract more informative features from both coded (tabular) data and narrative descriptions of the patient, biasing those unsupervised processes toward representing existing medical knowledge. I will outline what seem like further promising approaches. (Joint work with R. Joshi, A. Rumshisky, C. Hug, K. Kshetri, M. Ghassemi and T. Naumann.)

Peter Szolovits

Massachusetts Institute of Technology, USA

Coffee Break

2:45 PM-3:00 PM

Room:Ballroom Foyer - 3rd Floor

Thursday, May 2

CP4

Graph Stream Data Mining

3:00 PM-5:05 PM

Room:Capitol Ballroom D - 3rd Floor

Chair: Feida Zhu, Singapore Management University, Singapore

3:00-3:20 On Graph Stream Clustering with Side Information
Yuchen Zhao and Philip Yu, University of Ilinois at Chicago, USA

3:25-3:45 Dynamic Community Detection in Weighted Graph Streams
Chang-Dong Wang and Jian-Huang Lai, Sun Yat-Sen University, China; Philip Yu, University of Ilinois at Chicago, USA

3:50-4:10 DeltaCon: A Principled Massive-Graph Similarity Function
Danai Koutra, Carnegie Mellon University, USA; Joshua Vogelstein, Duke University, USA; Christos Faloutsos, Carnegie Mellon University, USA

4:15-4:35 What's Your Next Move: User Activity Prediction in Location-Based Social Networks
Jihang Ye, Zhe Zhu, and *Hong Cheng*, The Chinese University of Hong Kong, Hong Kong

4:40-5:00 CoFiSet: Collaborative Filtering Via Learning Pairwise Preferences over Item-Sets
Weike Pan and Li Chen, Hong Kong Baptist University, Hong Kong

Thursday, May 2

CP5

Anomaly & Outlier Detection

3:00 PM-5:05 PM

Room:Capitol Ballroom E - 3rd Floor

Chair: Nikunj Oza, NASA Ames Research Center, USA

3:00-3:20 *k*-Means{-}{-}: A Unified Approach to Clustering and Outlier Detection

Aristides Gionis, Yahoo! Research Barcelona, Spain; Sanjay Chawla, University of Sydney, Australia

3:25-3:45 CMI: An Information-Theoretic Contrast Measure for Enhancing Subspace Cluster and Outlier Detection

Hoang Vu Nguyen and Emmanuel Müller, Karlsruhe Institute of Technology, Germany; Jilles Vreeken, Universiteit Antwerpen, Belgium; Fabian Keller and Klemens Böhm, Karlsruhe Institute of Technology, Germany

3:50-4:10 Cost-Sensitive Double Updating Online Learning and Its Application to Online Anomaly Detection

Peilin Zhao and *Steven C.H. Hoi*, Nanyang Technological University, Singapore

4:15-4:35 Efficient Selection of Globally Optimal Rules on Large Imbalanced Data Based on Rule Coverage Relationship Analysis

Jinjiu Li, *Can Wang*, and Longbing Cao, University of Technology, Sydney, Australia; Philip S. Yu, University of Ilinois at Chicago, USA

4:40-5:00 Outlier Detection with Space Transformation and Spectral Analysis

Xuan-Hong Dang, Barbora Micenkova, and Ira Assent, Aarhus University, Denmark; Raymond T. Ng, University of British Columbia, Canada

Thursday, May 2

CP6

Multi-View and Multi-Source Data Mining

3:00 PM-5:05 PM

Room:Capitol Ballroom FGH - 3rd Floor

Chair: Shuiwang Ji, Old Dominion University, USA

3:00-3:20 Multi-Objective Multi-View Spectral Clustering Via Pareto Optimization

Xiang Wang, Buyue Qian, and *Ian Davidson*, University of California, Davis, USA; Jieping Ye, Arizona State University, USA

3:25-3:45 Multi-Transfer: Transfer Learning with Multiple Views and Multiple Sources

Ben Tan, Erheng Zhong, Evan Wei Xiang, and Qiang Yang, Hong Kong University of Science and Technology, Hong Kong

3:50-4:10 Multi-View Clustering Via Joint Nonnegative Matrix Factorization

Jialu Liu and Chi Wang, University of Illinois at Urbana-Champaign, USA; Jing Gao, State University of New York at Buffalo, USA; Jiawei Han, University of Illinois at Urbana-Champaign, USA

4:15-4:35 On Handling Negative Transfer and Imbalanced Distributions in Multiple Source Transfer Learning

Liang Ge, Jing Gao, Hung Ngo, Kang Li, and Aidong Zhang, State University of New York at Buffalo, USA

4:40-5:00 Unsupervised Feature Selection for Multi-View Data in Social Media

Jiliang Tang, Xia Hu, Huiji Gao, and Huan Liu, Arizona State University, USA

Thursday, May 2

TS2

Tutorial Session: Big Data Analytics for Healthcare

3:00 PM-5:05 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

In this tutorial, we introduce the characteristics and related mining challenges on dealing with big medical data. Many of those insights come from medical informatics community, which is highly related to data mining but focuses on biomedical specifics. We survey various related papers from data mining venues as well as medical informatics venues to share with the audiences key problems and trends in healthcare analytics research, with different applications ranging from clinical text mining, predictive modeling, patient similarity, genetic data analysis, privacy on medical data and medical images.

Jimeng Sun
IBM T.J. Watson Research Center, USA

Chandan Reddy
Wayne State University, USA

Organizational Break

5:05 PM-5:15 PM

Thursday, May 2

PP1

Poster Spotlights

5:15 PM-6:30 PM

Room:Capitol Ballroom DE - 3rd Floor

Time-Sensitive Classification of Behavioral Data
Shin Ando, Gunma University, Japan; Einoshin Suzuki, Kyushu University, Japan

An Examination of Practical Granger Causality Inference
Mohammad Taha Bahadori and Yan Liu, University of Southern California, USA

Bregman Divergence and Triangle Inequality
Sreangsu Acharyya, University of Texas at Austin, USA; *Arindam Banerjee* and Daniel L. Boley, University of Minnesota, USA

Joint Segmentation and Clustering in Text Corpuses
Samuel J. Blasiak, George Mason University, USA; Sithu Sudarsan, Food and Drug Administration, USA; Huzefa Rangwala, George Mason University, USA

Automatic Detection and Correction of Multi-Class Classification Errors Using System Whole-Part Relationships
Zhengzhang Chen, Northwestern University, USA; John Jenkins, North Carolina State University, USA; Alok Choudhary, Northwestern University, USA; Jinfeng Rao, Zhejiang University, China and North Carolina State University, USA; Fredrick Semazzi and Anatoli Melechko, North Carolina State University, USA; Vipin Kumar, University of Minnesota, USA; Nagiza Samatova, North Carolina State University and Oak Ridge National Laboratory, USA

Contextual Time Series Change Detection
XI Chen, Karsten Steinhaeuser, and Shyam Boriah, University of Minnesota, USA; Snigdhansu Chatterjee, University of Minnesota, Twin Cities, USA; Vipin Kumar, University of Minnesota, USA

continued in next column

Very Fast Similarity Queries on Semi-Structured Data from the Web
Bhavana Dalvi and William Cohen, Carnegie Mellon University, USA

Topic Models For Feature Selection in Document Clustering
Anna Drummond, Rice University, USA; Zografoula Vagena, LogicBlox Inc., USA; Chris Jermaine, Rice University, USA

A Nonparametric Mixture Model for Topic Modeling over Time
Ahmed Hefny, *Avinava Dubey*, Sinead Williamson, and Eric Xing, Carnegie Mellon University, USA

Discriminative Transfer Learning on Manifold
Zheng Fang and Zhongfei Zhang, Zhejiang University, China

SemInf: A Burst-Based Semantic Influence Model for Biomedical Topic Influence
Dan He, IBM T.J. Watson Research Center, USA; Douglas Parker, University of California, Los Angeles, USA

Pinch Ratio Clustering from a Topologically Intrinsic Lexicographic Ordering
Douglas R. Heisterkamp and Jesse Johnson, Oklahoma State University, USA

Retweeting: An Act of Viral Users, Susceptible Users, Or Viral Topics?
Tuan-Anh Hoang and Ee-Peng Lim, Singapore Management University, Singapore

Time Series Classification under More Realistic Assumptions
Bing Hu, Yanping Chen, and Eamonn Keogh, University of California, Riverside, USA

Finding Affordable and Collaborative Teams from a Network of Experts
Aijun An, *Mehdi Kargar*, and Morteza Zihayat, York University, Canada

IBSM: Interval-Based Sequence Matching
Alexios Kotsifakos, University of Texas at Arlington, USA; Panagiotis Papapetrou, Birkbeck, University of London, United Kingdom; Vassilis Athitsos, University of Texas at Arlington, USA

continued in next column

Modeling the Diffusion of Preferences on Social Networks
J Lou, Fu-Min Wang, Chin-Hua Tsai, San-Chuan Hung, Perng-Hwa Kung, and *Shou-De Lin*, National Taiwan University, Taiwan

Mining Labelled Tensors by Discovering Both Their Common and Discriminative Subspaces
Wei Liu, Jeffrey Chan, James Bailey, Christopher Leckie, and Ramamohanarao Kotagiri, The University of Melbourne, Australia

Modeling Clinical Time Series Using Gaussian Process Sequences
Zitao Liu and Milos Hauskrecht, University of Pittsburgh, USA

Integrity Verification of K-Means Clustering Outsourced to Infrastructure As a Service (IaaS) Providers
Wendy Hui Wang, *Ruilin Liu*, and Philippos Mordohai, Stevens Institute of Technology, USA; Hui Xiong, Rutgers University, USA

Selective Transfer Learning for Cross Domain Recommendation
Zhongqi Lu, Erheng Zhong, Lili Zhao, Wei Xiang, Weike Pan, and Qiang Yang, Hong Kong University of Science and Technology, Hong Kong

Change Detection from Temporal Sequences of Class Labels: Application to Land Cover Change Mapping
Varun Mithal and Ankush Khandelwal, University of Minnesota, Twin Cities, USA; Shyam Boriah, University of Minnesota, USA; Karsten Steinhaeuser, University of Minnesota, Twin Cities, USA; Vipin Kumar, University of Minnesota, USA

Fractional Immunization in Networks
B. Aditya Prakash, Virginia Tech, USA; Lada Adamic, and Theodore Iwashyna, University of Michigan, Ann Arbor, USA; Hanghang Tong, City College of CUNY, USA; Christos Faloutsos, Carnegie Mellon University, USA

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Fast Shapelets: A Scalable Algorithm for Discovering Time Series Shapelets
Thanawin Rakthanamanon and Eamonn Keogh, University of California, Riverside, USA

Mc-MinH: Metagenome Clustering Using Minwise Based Hashing
Zeehasham Rasheed and Huzefa Rangwala, George Mason University, USA

Shattering and Compressing Networks for Betweenness Centrality
A. Erdem Sariyuce, Erik Saule, Kamer Kaya, and Umit V. Catalyurek, The Ohio State University, USA

CoSelect: Feature Selection with Instance Selection for Social Media Data
Jiliang Tang and Huan Liu, Arizona State University, USA

A Hierarchical Probabilistic Model for Low Sample Rate Home-Use Energy Disaggregation
Bingsheng Wang and Haili Dong, Virginia Tech, USA; Arnold Boedihardjo, US Army Corps of Engineers, USA; Feng Chen and Chang-Tien Lu, Virginia Tech, USA

On the Detectability of Node Grouping in Networks
Chi Wang, Hongning Wang, Jialu Liu, Ming Ji, Lu Su, Yuguo Chen, and Jiawei Han, University of Illinois at Urbana-Champaign, USA

Mods: Multiple One-Class Data Streams Learning from Homogeneous Data
Yanshan Xiao and Bo Liu, University of Technology, Sydney, Australia; Yanshan Xiao, Guangdong University of Technology, China; Philip Yu, University of Ilinois at Chicago, USA; Zhifeng Hao, Guangdong University of Technology, China

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Robust Textual Data Streams Mining Based on Continuous Transfer Learning
Yanshan Xiao and Bo Liu, University of Technology, Sydney, Australia; Yanshan Xiao, Guangdong University of Technology, China; Philip Yu, University of Ilinois at Chicago, USA; Longbing Cao, University of Technology, Sydney, Australia; Zhifeng Hao, Guangdong University of Technology, China

Graphical Modeling of Macro Behavioral Targeting in Social Networks
Yusheng Xie, Zhengzhang Chen, Kunpeng Zhang, Md. Mostofa Ali Patwary, Yu Cheng, Haotian Liu, Ankit Agrawal, and Alok Choudhary, Northwestern University, USA

Learning Topics in Short Texts by Non-Negative Matrix Factorization on Term Correlation Matrix
Xiaohui Yan, Jiafeng Guo, Shenghua Liu, and Xueqi Cheng, Chinese Academy of Sciences, China; Yanfeng Wang, Sogou Inc., China

Set Coverage Problems in a One-Pass Data Stream
Huiwen Yu and Dayu Yuan, Pennsylvania State University, USA

Sentiment Topic Model with Decomposed Prior
Chengtao Li, Tsinghua University, P. R. China; *Jianwen Zhang*, Jian-Tao Sun, and Zheng Chen, Microsoft Research Asia

Topic-Level Expert Modeling in Community Question Answering
Tong Zhao, Naiwen Bian, Chunping Li, and Mengya Li, Tsinghua University, P. R. China

Butterfly Mixing: Accelerating Incremental-Update Algorithms on Clusters
Huasha Zhao and John Canny, University of California, Berkeley, USA

Feature Selection by Joint Graph Sparse Coding
Xiaofeng Zhu, University of Queensland, Australia; Xindong Wu, University of Vermont, USA; Wei Ding, University of Massachusetts, Boston, USA; Shichao Zhang, Guangxi Normal University, China

continued in next column

It Is Not Just What We Say, But How We Say Them: Lda-Based Behavior-Topic Model
Minghui Qiu, *Feida Zhu*, and Jing Jiang, Singapore Management University, Singapore

Welcome Reception and Poster Session

6:30 PM-9:00 PM

Room:Capitol View Terrace - 3rd Floor

Friday, May 3

Registration
7:30 AM-3:30 PM

Room:Ballroom Foyer - 3rd Floor

Continental Breakfast

7:30 AM

Room:Ballroom Foyer - 3rd Floor

Announcements
8:00 AM-8:15 AM

Room:Capitol Ballroom DE - 3rd Floor

Friday, May 3

IP3
Modeling Individual-Level Data in the 21st Century
8:15 AM-9:30 AM

Room:Capitol Ballroom DE - 3rd Floor

Chair: Joydeep Ghosh, University of Texas at Austin, USA

The collection and analysis of data related to human behavior has changed dramatically over the past 40 years, from the collection of small amounts of relatively static demographic data (such as a person's zipcode and education level), to much more detailed and dynamic transaction data (such as credit card and telephone records). More recently we have seen the rapid advent of individual-level "micro-data," including Web search, email, microblogs, online social media, geolocation data, and more. In this talk we will discuss some of the new research challenges and opportunities presented by such data. We will look at common themes across the variety of data sets and research projects in this general area, focusing both on what new types of data analysis techniques are likely to be needed, and what new scientific questions and applications are emerging in areas such as computational social science and public health.

Padhraic Smyth
University of California, Irvine, USA

Coffee Break

9:30 AM-10:00 AM

Room:Ballroom Foyer - 3rd Floor

Friday, May 3

CP7
Semi-Supervised and Active Learning
10:00 AM-12:05 PM

Room:Capitol Ballroom D - 3rd Floor

Chair: Romer Rosales, LinkedIn, USA

10:00-10:20 Smart: Semi-Supervised Music Emotion Recognition with Social Tagging
Bin Wu, Erheng Zhong, Derek Hao Hu, Andrew Horner, and Qiang Yang, Hong Kong University of Science and Technology, Hong Kong

10:25-10:45 Probabilistic Combination of Classifier and Cluster Ensembles for Non-Transductive Learning
Ayan Acharya, University of Texas at Austin, USA; Eduardo Hruschka, University of São Paulo at São Carlos, Brazil; Joydeep Ghosh, University of Texas at Austin, USA; Badrul Sarwar and Jean-David Ruvini, eBay Research Labs, USA

10:50-11:10 Active Learning to Rank Using Pairwise Supervision
Buyue Qian, University of California, Davis, USA; Hongfei Li and Jun Wang, IBM T.J. Watson Research Center, USA; Xiang Wang and Ian Davidson, University of California, Davis, USA

11:15-11:35 ActNeT: Active Learning for Networked Texts in Microblogging
Xia Hu, Jiliang Tang, Huiji Gao, and Huan Liu, Arizona State University, USA

11:40-12:00 Active Class Discovery and Learning for Networked Data
Meng Fang, University of Technology, Sydney, Australia; Jie Yin, CSIRO, Australia; Xingquan Zhu and Chengqi Zhang, University of Technology, Sydney, Australia

Friday, May 3

CP8

Applications

10:00 AM-12:05 PM

Room:Capitol Ballroom E - 3rd Floor

Chair: Hui Xiong, Rutgers University, USA

10:00-10:20 Climate Multi-Model Regression Using Spatial Smoothing
Karthik Subbian and Arindam Banerjee, University of Minnesota, USA

10:25-10:45 A Distribution Regularized Regression Framework for Climate Modeling
Zubin Abraham, Michigan State University, USA; Pang-Ning Tan, Perdinan Perdinan, Julie Winkler, and Shiyuan Zhong, Michigan State University, USA; Malgozata Liszewska, University of Warsaw, Poland

10:50-11:10 Sparse Representation for Hiv-1 Protease Drug Resistance Prediction
Xiaxia Yu, Irene Weber, and Robert Harrison, Georgia State University, USA

11:15-11:35 Dynamic Shaker Detection from Evolving Entities
Xiaoxiao Shi, University of Ilinois at Chicago, USA; Wei Fan, IBM T.J. Watson Research Center, USA; Philip Yu, University of Ilinois at Chicago, USA

11:40-12:00 Monitoring and Mining Gps Traces in Transit Space
Leon O. Stenneth and Philip Yu, University of Ilinois at Chicago, USA

Friday, May 3

CP9

Social Network Analysis

10:00 AM-12:05 PM

Room:Capitol Ballroom FGH - 3rd Floor

Chair: Shou-De Lin, National Taiwan University, Taiwan

10:00-10:20 Exploiting Synchronicity Networks for Finding Valuables in Heterogeneous Networks
Zhen Wen, IBM T.J. Watson Research Center, USA; Ching-Yung Lin, IBM Research, USA

10:25-10:45 Exploring and Inferring User-User Pseudo-Friendship for Sentiment Analysis with Heterogeneous Networks
Hongbo Deng and Jiawei Han, University of Illinois at Urbana-Champaign, USA; Hao Li and Heng Ji, City University of New York, USA; Hongning Wang, University of Illinois at Urbana-Champaign, USA; Yue Lu, Twitter Inc., USA; Chi Wang, University of Illinois at Urbana-Champaign, USA

10:50-11:10 Opinion Maximization in Social Networks
Aristides Gionis, Yahoo! Research Barcelona, Spain; Evamaria Terzi, Boston University, USA; Panayiotis Tsaparas, University of Ioannina, Greece

11:15-11:35 Point-of-Interest Recommendation in Location Based Social Networks with Topic and Location Awareness
Bin Liu and Hui Xiong, Rutgers University, USA

11:40-12:00 Community Detection with Prior Knowledge
Karthik Subbian, University of Minnesota, USA; Charu C. Aggarwal, IBM T.J. Watson Research Center, USA; Jaideep Srivastava, University of Minnesota, USA; Philip Yu, University of Ilinois at Chicago, USA

Friday, May 3

TS3

Tutorial Session: Crowdsourcing & Human Computation: Data Labeling & Building Hybrid Systems

10:00 AM-12:05 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

This tutorial is aimed at those with little to intermediate experience with crowdsourcing and human computation, who are interested in learning more about the capabilities and limitations of crowdsourcing for: 1) collecting labeled data; and 2) integrating human computation with automation to build more effective, hybrid intelligent systems.

Matthew Lease
University of Texas at Austin, USA

Lunch Break

12:05 PM-1:30 PM

Attendees on their own

Friday, May 3

IP4

Social Networks As Information Filters

1:30 PM-2:45 PM

Room:Capitol Ballroom DE - 3rd Floor

Chair: Zoran Obradovic, Temple University, USA

Social networks, especially online social networks, are driven by information sharing. But just how much information sharing is influenced by social networks? A large-scale experiment measured the effect of the social network on the quantity and diversity of information being shared within Facebook. While strong ties were found to be individually more influential, collectively it is the strong ties that wield more influence and provide more diverse information exposure. Furthermore, the network not only transmits information, but also often modifies it, allowing it to evolve.

Lada Adamic

University of Michigan, Ann Arbor, USA

Coffee Break

2:45 PM-3:00 PM

Room:Ballroom Foyer - 3rd Floor

Friday, May 3

CP10

Classification and Sparse Methods

3:00 PM-5:05 PM

Room:Capitol Ballroom FGH - 3rd Floor

Chair: Steven Hoi, Nanyang Technological University, Singapore

3:00-3:20 Regularization of Latent Variable Models to Obtain Sparsity
Ramnath Balasubramanyan and William Cohen, Carnegie Mellon University, USA

3:25-3:45 Sparse Max-Margin Multiclass and Multi-Label Classifier Design for Fast Inference
Tanuja Ganu, IBM Research, India; Shirish Shevade, Indian Institute of Science, Bangalore, India; S Sudararajan, Microsoft Research, India

3:50-4:10 An Empirical Study of the Suitability of Class Decomposition for Linear Models: When Does It Work Well?
Francisco Ocegueda-Hernandez and Ricardo Vilalta, University of Houston, USA

4:15-4:35 Reduced Set Kpca for Improving the Training and Execution Speed of Kernel Machines
Hassan A. Kingravi, Georgia Institute of Technology, USA

4:40-5:00 A New Perspective on Convex Relaxations of Sparse Svm
Noam Goldberg, Carnegie Mellon University, USA; Sven Leyffer and Todd Munson, Argonne National Laboratory, USA

Friday, May 3

TS4

Tutorial Session: Recent Advances in Applied Matrix Technologies

3:00 PM-5:05 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

Matrix is a natural representation for many real world data, such as an image, a collection of documents and an adjacency graph, and matrix related technologies has been very popular in data analytics research because of its nice interpretability, effectiveness and efficiency. This tutorial will overview the recent advances in applied matrix technologies, include nonnegative matrix factorization, rank minimization, sparse learning and online/distributed learning strategies. We will also present how these technologies are applied in social and healthcare informatics.

Fei Wang
Cornell University, USA

Hanghang Tong
IBM T.J. Watson Research Center, USA

Organizational Break

5:05 PM-5:15 PM

NSF Panel

5:15 PM-6:30 PM

Room:Capitol Ballroom DE - 3rd Floor

SIAG/DMA Business Meeting

6:30 PM-7:00 PM

Room:Capitol Ballroom DE - 3rd Floor

Complimentary wine and beer will be served.

Doctoral Forum and Student Posters

7:00 PM-9:00 PM

Room:Capitol View Terrace - 3rd Floor

Saturday, May 4

Registration
7:30 AM-4:00 PM

Room:Ballroom Foyer - 3rd Floor

Continental Breakfast

7:30 AM

Room:Ballroom Foyer - 3rd Floor

Analytics for Cyber-Physical Systems Workshop
8:05 AM-9:20 AM

Room:Capitol Ballroom FGH - 3rd Floor

For schedule, see page 17.

Data Mining for Medicine and Healthcare Workshop
8:30 AM-10:00 AM

Room:Capitol Ballroom D - 3rd Floor

For schedule, see pages 15-16.

Data Mining for Service and Maintenance Workshop
9:00 AM-10:00 AM

Room:Capitol Ballroom E - 3rd Floor

Saturday, May 4

TS5

Tutorial Session: Outlier Detection for Temporal Data
8:30 AM-10:00 AM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

In this tutorial, we will present an organized picture of recent research in temporal outlier detection. We will begin by motivating the importance of temporal outlier detection and briefing the challenges beyond usual outlier detection. Then, we will list down a taxonomy of proposed techniques for temporal outlier detection and cover some of the techniques in detail. We will summarize by presenting a collection of applications where temporal outlier detection techniques have been applied to discover interesting outliers.

Manish Gupta
University of Illinois at Urbana-Champaign, USA

Jing Gao
State University of New York at Buffalo, USA

Charu C. Aggarwal
IBM T.J. Watson Research Center, USA

Jiawei Han
University of Illinois at Urbana-Champaign, USA

Saturday, May 4

Analytics for Cyber-Physical Systems Workshop, continued
9:30 AM-10:35 AM

Room:Capitol Ballroom FGH - 3rd Floor

For schedule, see page 17.

Coffee Break

10:00 AM-10:30 AM

Room:Ballroom Foyer - 3rd Floor

Data Mining for Medicine and Healthcare Workshop, continued
10:30 AM-12:00 PM

Room:Capitol Ballroom D - 3rd Floor

For schedule, see pages 15-16.

Data Mining for Service and Maintenance Workshop, continued
10:30 AM-12:00 PM

Room:Capitol Ballroom E - 3rd Floor

Saturday, May 4

TS5

Tutorial Session: Outlier Detection for Temporal Data, continued

10:30 AM-12:00 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

In this tutorial, we will present an organized picture of recent research in temporal outlier detection. We will begin by motivating the importance of temporal outlier detection and briefing the challenges beyond usual outlier detection. Then, we will list down a taxonomy of proposed techniques for temporal outlier detection and cover some of the techniques in detail. We will summarize by presenting a collection of applications where temporal outlier detection techniques have been applied to discover interesting outliers.

Manish Gupta
University of Illinois at Urbana-Champaign, USA

Jing Gao
State University of New York at Buffalo, USA

Charu C. Aggarwal
IBM T.J. Watson Research Center, USA

Jiawei Han
University of Illinois at Urbana-Champaign, USA

Saturday, May 4

Analytics for Cyber-Physical Systems Workshop, continued

10:45 AM-12:30 PM

Room:Capitol Ballroom FGH - 3rd Floor

For schedule, see page 17.

Lunch Break

12:00 PM-1:30 PM

Attendees on their own

Data Mining for Service and Maintenance Workshop, continued

1:30 PM-3:00 PM

Room:Capitol Ballroom E - 3rd Floor

Reliability Aware Data Fusion in Participatory Networks Workshop

1:30 PM-3:00 PM

Room:Capitol Ballroom FGH - 3rd Floor

For schedule, see page 18.

Data Mining for Medicine and Healthcare Workshop, continued

1:30 PM-3:00 PM

Room:Capitol Ballroom D - 3rd Floor

For schedule, see pages 15-16.

Saturday, May 4

TS6

Tutorial Session: Online Learning for Big Data Mining: Methods and Applications

1:30 PM-3:00 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

In this tutorial, the main content consists of two parts:

(i) online learning methods for linear classification/prediction, and

(ii) kernel-based online learning methods for nonlinear classification/prediction.

Steven C.H. Hoi
Nanyang Technological University, Singapore

Coffee Break

3:00 PM-3:30 PM

Room:Ballroom Foyer - 3rd Floor

Data Mining for Medicine and Healthcare Workshop, continued

3:15 PM-5:00 PM

Room:Capitol Ballroom D - 3rd Floor

For schedule, see pages 15-16.

Data Mining for Service and Maintenance Workshop, continued

3:30 PM-5:30 PM

Room:Capitol Ballroom E - 3rd Floor

Reliability Aware Data Fusion in Participatory Networks Workshop, continued

3:30 PM-5:00 PM

Room:Capitol Ballroom FGH - 3rd Floor

For schedule, see pages 18.

Saturday, May 4

TS6

Tutorial Session: Online Learning for Big Data Mining: Methods and Applications, continued

3:30 PM-5:00 PM

Room:Capitol Ballroom ABC - 3rd Floor

Chair: Jieping Ye, Arizona State University, USA

In this tutorial, the main content consists of two parts:

(i) online learning methods for linear classification/prediction, and

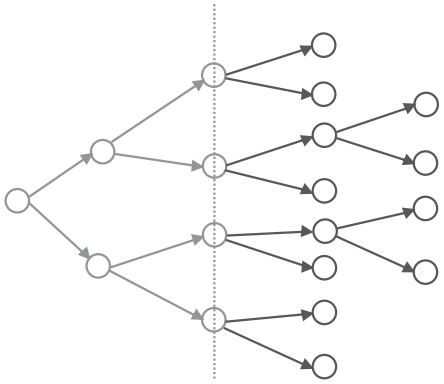
(ii) kernel-based online learning methods for nonlinear classification/prediction.

Steven C.H. Hoi
Nanyang Technological University, Singapore

SDM13 Abstracts

2013 SIAM International Conference on DATA MINING

May 2–4, 2013



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Austin, Texas, USA

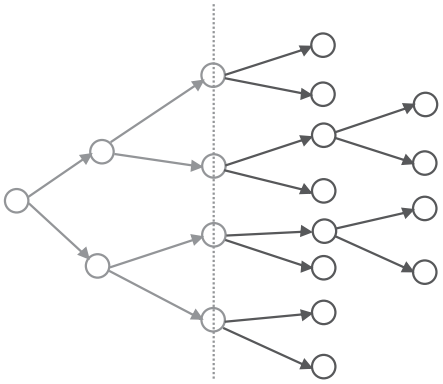
Abstracts are printed as submitted by the authors.

last page of abstracts

Organizer and Speaker Index

2013 SIAM International Conference on DATA MINING

May 2–4, 2013



Sheraton Austin Hotel at the Capitol
Austin, Texas, USA

A

Abraham, Zubin, CP8, 10:25 Fri

Acharya, Ayan, CP7, 10:25 Fri

Adamic, Lada, IP4, 1:30 Fri

Aggarwal, Charu C., TS5, 8:30 Sat

Akoglu, Leman, CP1, 11:40 Thu

Ando, Shin, PP1, 5:15 Thu

B

Bahadori, Mohammad Taha, PP1, 5:15 Thu

Balasubramanyan, Ramnath, CP10, 3:00 Fri

Banerjee, Arindam, PP1, 5:15 Thu

Blasiak, Samuel J., PP1, 5:15 Thu

Bogdanov, Petko, CP1, 11:15 Thu

Boley, Daniel L., CP3, 10:25 Thu

C

Chen, XI, PP1, 5:15 Thu

Chen, Zhengzhang, PP1, 5:15 Thu

Cheng, Hong, CP4, 4:15 Thu

Clémençon, Stephan, CP1, 10:50 Thu

D

Dalvi, Bhavana, PP1, 5:15 Thu

Dang, Xuan-Hong, CP5, 4:40 Thu

Davidson, Ian, CP6, 3:00 Thu

Drummond, Anna, PP1, 5:15 Thu

Dubey, Avinava, PP1, 5:15 Thu

F

Fang, Meng, CP7, 11:40 Fri

Fang, Zheng, PP1, 5:15 Thu

G

Ganu, Tanuja, CP10, 3:25 Fri

Gao, Jing, TS5, 8:30 Sat

Ge, Liang, CP6, 4:15 Thu

Gionis, Aristides, CP5, 3:00 Thu

Gionis, Aristides, CP9, 10:50 Fri

Goldberg, Noam, CP10, 4:40 Fri

Gupta, Manish, TS5, 8:30 Sat

H

Han, Jiawei, TS5, 8:30 Sat

He, Dan, PP1, 5:15 Thu

Heisterkamp, Douglas R., PP1, 5:15 Thu

Hoang, Tuan-Anh, PP1, 5:15 Thu

Hoi, Steven C.H., CP5, 3:50 Thu

Hoi, Steven C.H., TS6, 1:30 Sat

Hu, Bing, PP1, 5:15 Thu

Hu, Xia, CP7, 11:15 Fri

K

Kargar, Mehdi, PP1, 5:15 Thu

Kingravi, Hassan A., CP10, 4:15 Fri

Kong, Xiangnan, CP2, 11:40 Thu

Kotsifakos, Alexios, PP1, 5:15 Thu

Koutra, Danai, CP4, 3:50 Thu

L

Lease, Matthew, TS3, 10:00 Fri

Li, Cheng-Te, TS1, 10:00 Thu

Lin, Shou-De,TS1, 10:00 Thu

Lin, Shou-De, PP1, 5:15 Thu

Liu, Bin, CP9, 11:15 Fri

Liu, Chunyang, CP2, 11:15 Thu

Liu, Jialu, CP6, 3:50 Thu

Liu, Ruilin, PP1, 5:15 Thu

Liu, Wei, PP1, 5:15 Thu

Liu, Zitao, PP1, 5:15 Thu

Lu, Zhongqi, PP1, 5:15 Thu

M

Mai, Son T., CP3, 10:50 Thu

Mithal, Varun, PP1, 5:15 Thu

N

Nguyen, Hoang Vu, CP5, 3:25 Thu

Nychka, Doug, IP1, 8:15 Thu

O

Ocegueda-Hernandez, Francisco, CP10, 3:50 Fri

P

Pan, Weike, CP4, 4:40 Thu

Prakash, B. Aditya, PP1, 5:15 Thu

Q

Qian, Buyue, CP7, 10:50 Fri

R

Race, Shaina L., CP3, 10:00 Thu

Rakthanamanon, Thanawin, PP1, 5:15 Thu

Ram, Parikshit, CP1, 10:00 Thu

Rasheed, Zeehasham, PP1, 5:15 Thu

Reddy, Chandan K., TS2, 3:00 Thu

S

Saha, Budhaditya, CP3, 11:40 Thu

Sariyuce, A. Erdem, PP1, 5:15 Thu

Seshadhri, C., CP1, 10:25 Thu

Shi, Xiaoxiao, CP8, 11:15 Fri

Smyth, Padhraic, IP3, 8:15 Fri

Stenneth, Leon O., CP8, 11:40 Fri

Subbian, Karthik, CP8, 10:00 Fri

Subbian, Karthik, CP9, 11:40 Fri

Sun, Jimeng, TS2, 3:00 Thu

Szolovits, Peter, IP2, 1:30 Thu

T

Tan, Ben, CP6, 3:25 Thu

Tan, Pang-Ning, CP2, 10:00 Thu

Tang, Jiliang, CP6, 4:40 Thu

Tang, Jiliang, PP1, 5:15 Thu

Tong, Hanghang, TS4, 3:00 Fri

Italicized names indicate session organizers.

W

Wang, Bingsheng, PP1, 5:15 Thu
Wang, Can, CP5, 4:15 Thu
Wang, Chang-Dong, CP4, 3:25 Thu
Wang, Chi, PP1, 5:15 Thu
Wang, Chi, CP9, 10:25 Fri
Wang, Fei, TS4, 3:00 Fri
Wen, Zhen, CP9, 10:00 Fri
Wu, Bin, CP7, 10:00 Fri

X

Xiao, Yanshan, PP1, 5:15 Thu
Xiao, Yanshan, PP1, 5:15 Thu
Xie, Yusheng, PP1, 5:15 Thu

Y

Yan, Xiaohui, PP1, 5:15 Thu
Yeh, Mi-Yen, TS1, 10:00 Thu
Yu, Huiwen, PP1, 5:15 Thu
Yu, Xiaxia, CP8, 10:50 Fri

Z

Zhang, Jianwen, PP1, 5:15 Thu
Zhang, Miao, CP2, 10:50 Thu
Zhang, Wenlu, CP3, 11:15 Thu
Zhao, Huasha, PP1, 5:15 Thu
Zhao, Tong, PP1, 5:15 Thu
Zhao, Yuchen, CP4, 3:00 Thu
Zhou, Jiayu, CP2, 10:25 Thu
Zhu, Feida, PP1, 5:15 Thu
Zhu, Xiaofeng, PP1, 5:15 Thu

Italicized names indicate session organizers.

Notes

SDM13 Budget

Conference Budget
SIAM Conference on Data Mining
May 2-4, 2013
Austin, TX

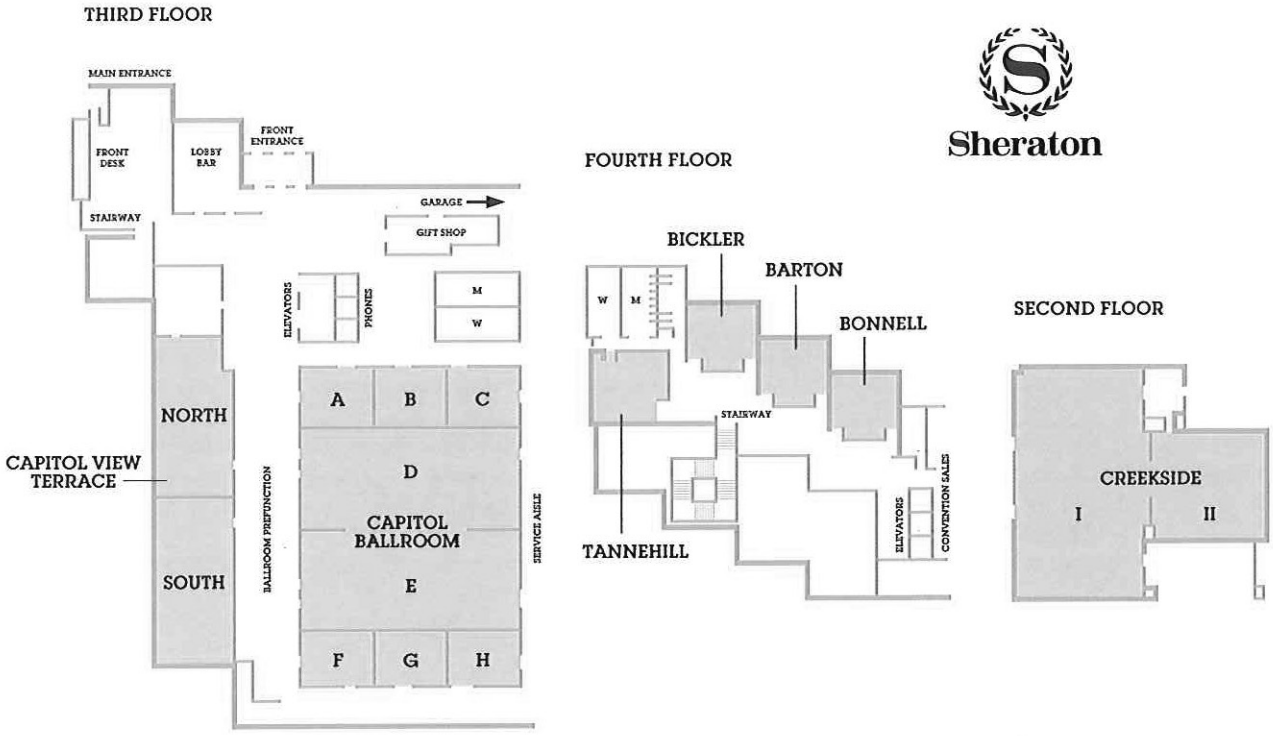
Expected Paid Attendance 250

Revenue		
Registration Income		$99,130
	Total	$99,130
Expenses		
Printing		$1,300
Organizing Committee		$1,700
Invited Speakers		$10,400
Food and Beverage		$22,600
AV Equipment and Telecommunication		$18,300
Advertising		$4,000
Proceedings		$14,200
Conference Labor (including benefits)		$30,580
Other (supplies, staff travel, freight, misc.)		$4,800
Administrative		$10,926
Accounting/Distribution & Shipping		$7,667
Information Systems		$10,443
Customer Service		$3,933
Marketing		$6,391
Office Space (Building)		$4,289
Other SIAM Services		$4,783
	Total	$156,312
Net Conference Expense		($57,182)
Support Provided by SIAM		$57,182
		$0

Estimated Support for Travel Awards not included above:

Post Docs	2	$1,600

Sheraton Austin Hotel at the Capitol Map



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