

SDM15 Accepted Oral Presentations

Paper Title	Author Names
A Bayesian Framework for Modeling Human Evaluations	Himabindu Lakkaraju*, Stanford University; Jure Leskovec, Stanford; Jon Kleinberg, Cornell University; Sendhil Mullainathan,
A Distributed Frank-Wolfe Algorithm for Communication-Efficient Sparse Learning	Aurélien Bellet*, University of Southern California; Yingyu Liang, Princeton University; Alireza Bagheri Garakani, University of Southern California; Maria-Florina Balcan, Carnegie Mellon University; Fei Sha, University of Southern California
A Divide-and-Conquer Algorithm for Betweenness Centrality	Dora Erdos*, Boston University; Vatche Ishakian, IBM ; Evimaria Terzi, Boston University; Azer Bestavros,
Active Multi-task Learning via Bandits	Meng Fang*, UTS; Dacheng Tao, University of Technology, Sydney
An ADMM Algorithm for Clustering Partially Observed Networks	Necdet Aybat*, Penn State University; Sahar Zarmehri, Penn State University; Soundar Kumara, Penn State University
An LLE based Heterogeneous Metric Learning for Cross-media Retrieval	Peng Zhou*, Institute of Software, CAS; Liang Du, ; Yi-Dong Shen,
Attacking DBSCAN for Fun and Profit	Jonathan Crussell*, Sandia National Laboratories; Philip Kegelmeyer, Sandia National Laboratories
Believe It Today or Tomorrow? Detecting Untrustworthy Information from Dynamic Multi-Source Data	Houping Xiao*, SUNY Buffalo; Yaliang Li, SUNY Buffalo; Jing Gao, SUNY at Buffalo; Fei Wang, IBM; Liang Ge, Google; Wei Fan, Huawei Noahs Ark Lab; Long Vu, IBM T.J. Watson Research Center; Deepak Turaga, IBM T.J. Watson Research Center
Binary classifier calibration using a Bayesian non-parametric approach	Mahdi Pakdaman Naeini*, University of Pittsburgh; Gregory Cooper, DBMI University of Pittsburgh; Milos Hauskrecht, University of Pittsburgh
Cheetah: Fast Graph Kernel Tracking on Dynamic Graphs	Liangyue Li*, Arizona State University; Hanghang Tong, ASU; Yanghua Xiao, Fudan University; Wei Fan, Huawei Noahs Ark Lab
Clustering and Ranking in Heterogeneous Information Networks via Gamma-Poisson Model	Junxiang Chen*, Northeastern University; Wei Dai, Northeastern University; Yizhou Sun, Northeastern University; Jennifer Dy, Northeastern University

Community Detection for Emerging Networks	Jiawei Zhang*, UIC; Philip S. Yu, University of Illinois at Chicago
Convex Matrix Completion: A Trace-Ball Optimization Perspective	Guangxiang Zeng*, USTC; Ping Luo, ICT; Enhong Chen, USTC; Hui Xiong, Rutgers University; Hengshu Zhu, Baidu.com
Cross-Modal Retrieval: A Pairwise Classification Approach	Aditya Menon*, National ICT Australia; Didi Surian, University of Sydney; Sanjay Chawla, University of Sydney
Data mining for real mining: A robust algorithm for prospectivity mapping with uncertainties	Justin Granek*, UBC; Eldad Haber,
Dropout Training of Matrix Factorization and Autoencoders for Link Prediction in Sparse Graphs	Shuangfei Zhai*, Binghamton University; Zhongfei Zhang,
Efficient Algorithms for a Robust Modularity-Driven Clustering of Attributed Graphs	Patricia Iglesias Sanchez*, KIT; Emmanuel Müller, Karlsruhe Institute of Technology (KIT); Uwe Leo Korn, KIT; Klemens Boehm, KIT; Andrea Kappes, KIT; Tanja Hartmann, ; Dorothea Wagner, KIT
Efficient Online Relative Comparison Kernel Learning	Eric Heim*, University of Pittsburgh; Matthew Berger, Air Force Research Laboratory, Information Directorate; Lee Seversky, Air Force Research Laboratory, Information Directorate; Milos Hauskrecht, University of Pittsburgh
Efficient Partial Order-preserving Unsupervised Feature Selection on Networks	Xiaokai Wei*, University of Illinois Chicago; Sihong Xie, UIC; Philip Yu,
Exceptional Model Mining with Tree-Constrained Gradient Ascent	Ad Feelders*, Universiteit Utrecht; Thomas Krak, Universiteit Utrecht
Exploring the Impact of Dynamic Mutual Influence on Social Event Participation	Tong Xu*, USTC; Hao Zhong, Rutgers University; Hengshu Zhu, Baidu.com; Hui Xiong, Rutgers University; Enhong Chen, USTC; Guannan Liu,
Factorized bilinear similarity for cold-start item recommendations	Mohit Sharma*, University of Minnesota; George Karypis, U. Minnesota; Jiayu Zhou, Samsung Research; Junling Hu, Samsung Research America
Fast Eigen-Functions Tracking on Dynamic Graphs	Chen Chen*, Arizona State University; Hanghang Tong, Arizona State University
Fast Mining of a Network of Coevolving Time Series	Yongjie Cai*, GC, CUNY; Hanghang Tong, Arizona State University; Wei Fan, Huawei Noahs Ark Lab; Ping Ji, GC, CUNY

Faster Jobs in Distributed Data Processing using Multi-Task Learning	Neeraja Yadwadkar*, UC Berkeley; Bharath Hariharan, University of California, Berkeley; Joseph Gonzalez, University of California, Berkeley; Randy Katz, University of California, Berkeley
Feature Selection for Nonlinear Regression and its Application to Cancer Research	Yijun Sun*,
Formula: FactORized MULTI-task LeARning for task discovery in personalized medical models	Jianpeng Xu*, Michigan state university; Jiayu Zhou, Arizona State University; Pang-Ning Tan,
Frameworks to Encode User Preferences for Inferring Topic-sensitive Information Networks	Qingbo Hu*, University of Illinois at Chic; Sihong Xie, UIC; Shuyang Lin, U of Illinois at Chicago; Wei Fan, Huawei Noah's Ark Lab; Philip Yu,
From Categorical to Numerical: Multiple Transitive Distance Learning and Embedding	Kai Zhang*, NEC Laboratories America; Qiaojun Wang, Rutgers University; Zhengzhang Chen, NEC Laboratories America; Ivan Marsic, Rutgers University; Vipin Kumar, U. Minnesota
Functional Node Detection on Linked Data	Kang Li*, State University of New York at Buffalo; Jing Gao, SUNY at Buffalo; Suxin Guo, University at Buffalo, The State University of New York; Nan Du, University at Buffalo, The State University of New York; Aidong Zhang, State University of New York at Buffalo
Getting to Know the Unknown Unknowns: Destructive-Noise Resistant Boolean Matrix Factorization	Sanjar Karaev*, MPI Informatics; Pauli Miettinen, Max-Planck-Institute for Informatics; Jilles Vreeken, MPI
GIN: A Unified Model for Capturing Dual Heterogeneity in Clustering Networked Data	Jialu Liu*, UIUC; Wang Chi, UIUC; Quanquan Gu, UIUC; Jiawei Han, ; Jing Gao, SUNY at Buffalo; Charu Aggarwal, IBM Watson Research; Lance Kaplan, U.S. Army Research Laboratory
Health Insurance Market Risk Assessment: Covariate Shift and k-Anonymity	Dennis Wei, IBM Research; Karthikeyan Natesan Ramamurthy, IBM Research; Kush Varshney*, IBM Research
Hidden Hazards: Finding Missing Nodes in Large Graph Epidemics	Shashidhar Sundareisan, Virginia Tech.; Jilles Vreeken, MPI; B. Aditya Prakash*, Virginia Tech
Hierarchical Active Transfer Learning	David Kale*, University of So. California; Marjan Ghazvininejad, University of So. California; Anil Ramakrishna, University of So. California; Jingrui He, Arizona State University; Yan Liu, University of So. California

Labeling Educational Content with Academic Learning Standards	Danish Contractor*, IBM Research; Kashyap Popat, ; Shajith Ikbal, IBM Research; Sumit Negi, IBM Research; Bikram Sengupta, IBM Research; mukesh Mohania, IBM Research
Learning Complex Rare Categories with Dual Heterogeneity	Pei Yang*, The City University of New Yor; Jingrui He, ; Jia-Yu Pan,
Legislative Prediction with Dual Uncertainty Minimization from Heterogeneous Information	Yu Cheng*, Northwestern University; Huan Liu, ASU; Alok Choudhary, Northwestern University; Ankit Agrawal, Northwestern University
Less is More: Building Selective Anomaly Ensembles with Application to Event Detection in Temporal Graphs	Shebuti Rayana, Stony Brook University; Leman Akoglu*, SUNY Stony Brook
Link Prediction Using Multiple Sources	Karthik Subbian*, University of Minnesota; Arindam Banerjee, University of Minnesota; Sugato Basu, Google
Low Rank Representation on Riemannian Manifold of Symmetric Positive Definite Matrices	Yifan Fu*, CSU; Junbin Gao, CSU; Xia Hong, University of Reading; David Tien, CSU
Mining Significant Subgraphs with Multiple Testing Correction	Mahito Sugiyama*, ISIR, Osaka University; Felipe López, ETH Zürich; Niklas Kasenburg, University of Copenhagen; Karsten Borgwardt, ETH Zürich
Modeling Collusions in Online Review Spam Campaigns	Chang Xu*, Nanyang technological universi
Modeling Users' Adoption Behaviors with Social Selection and Influence	Ziqi Liu*, Xi'an Jiaotong University; Fei Wang, IBM
Near-separable Non-negative Matrix Factorization with ℓ_1 - and Bregman Loss Functions	Abhishek Kumar*, IBM; Vikas Sindhwani, IBM
NetCodec: Community Detection from Individual Activities	LONG TRAN*, Georgia Tech; Mehrdad Farajtabar, Georgia Institute of Technology; Le Song, Georgia Institute of Technology; Hongyuan Zha, Georgia Institute of Technology
On Influential Nodes Tracking in Dynamic Social Networks	Xiaodong Chen*, Peking University
On the Non-Trivial Generalization of Dynamic Time Warping to the Multi-Dimensional Case	Mohammad Shokoohi-Yekta*, UC Riverside; Jun Wang, UT Dallas; Eammon Keogh, UC Riverside
Online Display Advertising Causal Attribution on the Clickers using Randomized Experiments and Potential Outcomes	Joel Barajas*, UC Santa Cruz; Ram Akella, ; Aaron Flores, AOL Research, Palo Alto, CA; Marius Holtan, AOL Research, Palo Alto, CA

Online Resource Allocation with Structured Diversification	Nicholas Johnson*, University of Minnesota; Arindam Banerjee, University of Minnesota
PatentCom: A Comparative View of Patent Document Retrieval	Longhui Zhang*, FIU; Lei Li, Florida International University; Tao Li, Florida International University; Chao Shen,
Personalized TV Recommendation with Mixture Probabilistic Matrix Factorization	Huayu Li*, UNCC; Yong Ge, UNC Charlotte
Polyglot-NER: Massive Multilingual Named Entity Recognition	Rami Al-Rfou*, Stony Brook University; Vivek Kulkarni, Stony Brook University; Bryan Perozzi, Stony Brook University; Steven Skiena, Stony Brook University
Principled Neuro-Functional Connectivity Discovery	Kejun Huang*, University of Minnesota; Nikolaos Sidiropoulos, University of Minnesota; Christos Faloutsos, Carnegie Mellon University; Evangelos Papalexakis, Carnegie Mellon University; Partha Talukdar, Indian Institute of Science; Tom Mitchell, Carnegie Mellon University
Product Adoption Rate Prediction: A Multi-factor View	Le Wu*, USTC; Qi Liu, University of Science and Technology of China; Enhong Chen, USTC; Xing Xie, Microsoft Research
Propagation-based Sentiment Analysis for Microblogging Data	Jiliang Tang*, Arizona State University
Rare Class Detection in Networks	Karthik Subbian*, University of Minnesota; Charu Aggarwal, IBM Watson Research; Jaideep Srivastava, University of Minnesota; Vipin Kumar, UMN
Reducing the spectral radius to control epidemic spread	Sudip Saha*, Virginia Tech; Abhijin Adiga, Virginia Tech; B. Aditya Prakash, Virginia Tech; Anil Vullikanti,
Result Integrity Verification of Outsourced Privacy-preserving Frequent Itemset Mining	Ruilin Liu, Stevens Institute of Technology; Wendy (Hui) Wang*, Stevens Institute of Technology
Same bang, fewer bucks: Efficient discovery of the cost-influence skyline	Matthijs van Leeuwen, KU Leuven; Antti Ukkonen*, HIIT
Scaling log-linear analysis to datasets with thousands of variables	Francois Petitjean*, Monash University; Geoffrey Webb, Monash University
Selecting shortcuts for a smaller world	Nikos Parotsidis*, University of Ioannina; Evaggelia Pitoura, University of Ioannina; Panayiotis Tsaparas, University of Ioannina
Selecting Social Media Responses to News: A Convex Framework Based On Data Reconstruction	Zaiyi Chen, University of Science and Technology of China; Linli Xu*, USTC; Enhong Chen, USTC

Semi-supervised learning for structured regression on partially observed attributed graphs	Jelena Stojanovic*, Temple University; Milos Jovanovic, University of Belgrade; Djordje Gligorijevic, Temple University; Zoran Obradovic, Temple University
Shapelet Ensemble for Multi-dimensional Time Series	Mustafa Cetin*, University of New Mexico; Abdullah Mueen, University of New Mexico; Vince Calhoun, University of New Mexico, he Mind Research Network
SourceSeer: Forecasting Rare Disease Outbreaks Using Multiple Data Sources	Theodoros Rekatsinas*, University of Maryland; Saurav Ghosh, Virginia Tech; Sumiko Mekaru, Boston Children's Hospital, MA, USA; Elaine Nsoesie, Boston Children's Hospital, MA, USA; John Brownstein, Boston Children's Hospital, MA, USA; Lise Getoor, University of California, Santa Cruz; Naren Ramakrishnan, Virginia Tech
Spectral Embedding of Signed Networks	David Skillicorn*, Queen's University; Quan Zheng, Queen's University
Tensor Spectral Clustering for Partitioning Higher-order Network Structures	Austin Benson*, Stanford University; David Gleich, Purdue University; Jure Leskovec, Stanford
Time-dependent Timeline Generation	Rumeng Li*, Peking University
Towards Permission Request Prediction on Mobile Apps via Structure Feature Learning	Deguang Kong*, Samsung Research America; Hongxia Jin,
Vertex Clustering of Augmented Graph Streams	Ryan McConville*, Queen's University Belfast; Weiru Liu, Queen's University Belfast; Paul Miller, Queen's University Belfast
Where Graph Topology Matters: The Robust Subgraph Problem	Hau Chan, Stony Brook University; Shuchu Han, Stony Brook University; Leman Akoglu*, SUNY Stony Brook

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