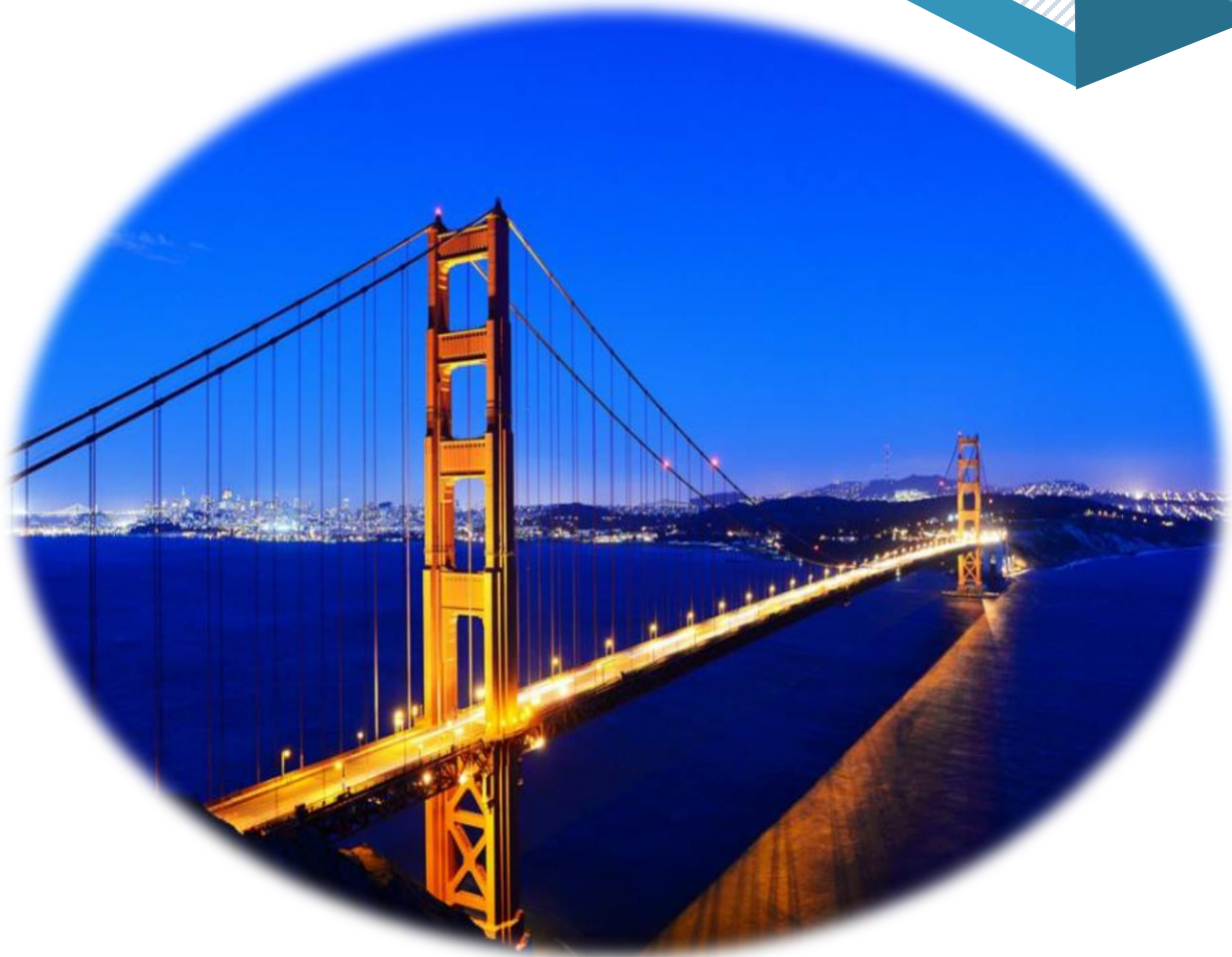




28th Workshop on Information Technologies and Systems
December 16-18, 2018, Santa Clara, CA, USA



WITS 2018

December 16-18

Santa Clara, CA, USA

<http://witsconf.org/wits2018/>



WITS 2018

December 16-18

CA, USA

Welcome Message

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About WITS

WITS was conceptualized in 1991 by Dr. Richard Wang (MIT) and Dr. Sudha Ram (University of Arizona). Subsequently, the first conference was held on December 14th in Boston and co-chaired by Richard Wang and Sudha Ram. Also involved in the early conferences were Sal March, Prabuddah De, Al Hevner, Stuart Madnick, Veda Storey, Diane Strong, Andy Whinston, Carson Woo, and others.

Philosophy

The WITS community is focused on addressing complex business problems or societal issues using current and emerging information technologies. We also encourage research that can change the way information technology functions (e.g., by designing, modifying, or contrasting systems) so that they can better solve real-world problems. All problem-solving paradigms – including empirical, analytical, behavioral, experimental, and computational – are invited. Integrative approaches, whether methodological or functional, are welcome.



Welcome Messages from WITS President

Since inception in 1991, WITS has emerged as the premier workshop in Information Systems addressing challenges at the cutting-edge of information technology with rigorous research methodologies. Over the years, numerous foundational research that had profound impact on practice and research, was presented, discussed and refined at the workshop. Particularly noteworthy is that research at WITS often tends to be prescriptive, with descriptive and predictive learning from data translated to solutions strategies optimized for the future. That WITS 2018 is being held in the heart of Silicon Valley is propitious as it brings our academic community to the birthplace of innovation that has fundamentally transformed business and society. A forward-looking theme, 'Transforming Future at the Heart of Technology and Innovation' will make for a dynamic and engaging workshop this year. Along with the regular papers, we are pleased that there will be two focused sessions that emanated from WITS feeder workshops: Technology – Enabled Socioeconomic Transformations and Smart Data Pricing. The workshop will also feature keynotes from Dr. Phil Mui, a senior Vice President at Salesforce and Dr. Arun Rai, editor-in-chief of MIS Quarterly. Along with the program organizers, I am pleased to welcome you to WITS 2018 in Santa Clara. We look forward to meeting, interacting, and learning from you.

Sincerely,

Ram Gopal
Information Systems Society Distinguished Fellow



Welcome Messages from Program Co-chairs

On behalf of the Organizing Committee, we would like to extend our warmest welcome to all of you at the 28th Workshop on Information Technologies and Systems (WITS 2018) at Santa Clara University, Santa Clara, California. As always, the purpose of the WITS 2018 is to provide a forum for discussion and interaction among scholars with research interests in the cutting-edge issues of information technologies and systems. What is special about WITS 2018 is that it is happening right at the heart of technology innovation, the Silicon Valley. Accordingly, the theme of WITS18 is “Transforming Future at the Heart of Technology and Innovation.” Based on our estimation, around 160 researchers from institutions across the world will be attending WITS 2018, making it one of the best attended meetings in WITS’ history.

This year we have received 113 regular research paper submissions, 38 of which have been selected for full presentation, and 16 for poster presentation. The academic papers cover a variety of latest topics such as blockchain, cryptocurrency, deep learning, and natural language processing, to name a few. Additionally, we have received and accepted 8 innovative submissions for prototype/demo presentation. Finally, WITS 2018 has drawn overwhelming interests from graduating doctoral students. We have received 12 high-quality dissertation proposals, out of which 4 have been nominated for best dissertation award and will be presented at the meeting.

Given the theme of WITS 2018, we have invited friends from the industry to attend WITS and share their knowledge and perspectives regarding digital innovations and R&D in today’s IT industry. We have arranged two sessions (Sessions 1A and 2A) for presentations by researchers from well-known high-tech companies such as Snap, Facebook, IBM Almaden, eBay, Dropbox, and Microsoft. We hope that these presentations will motivate our academic and industry attendees to exchange ideas about how to initiate more innovative and practical research.

The workshop program also features two outstanding keynote speeches, to be delivered by Dr. Phil Mui, Senior VP of Salesforce, and Prof. Arun Rai from Georgia State University. We look forward to learning from their wisdom accumulated from decades of industry and academic experience.

WITS is not only an academic meeting, but also a closely tied community of its members. Thus, in addition to facilitating the exchange of ideas, another important goal of WITS 2018 is community building. With that objective in mind, we have arranged four social events, including a winery visit, an opening-night reception, a cruise tour, and a closing-night dinner. We hope that many collaborations and innovative research ideas can emerge out of the communications and discussions in these informal settings.

We would like to thank all the sponsors of the WITS 2018. The list of sponsors is provided at the end of this brochure. Without the generous support of the sponsoring institutions, we could not have organized this workshop with so many exciting activities and presentations.

We also would like to express our deep gratitude to the WITS board, including the WITS president Prof. Ram Gopal and treasurer Prof. Haldun Aytug, for their guidance on organizing WITS 2018. In addition, we would like to thank the Best Paper Selection Committee chaired by Prof. Sumit Sarkar, the Best Dissertation Selection Committee chaired by Prof. Sudha Ram, the program committee, the reviewers, presenters, and all the authors, for helping us create a rich and exciting program for WITS 2018.

We hope you will have a very productive and enjoyable time at Santa Clara with colleagues and friends from across the world.

Sincerely,
Kaushik Dutta
University of South Florida

Zhengrui (Jeffrey) Jiang
Iowa State University



WITS BOARD MEMBERS



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Ram Gopal
School of Business
University of Connecticut



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WITS2018 CONFERENCE COMMITTEE

Program Co-Chairs:



Kaushik Dutta
University Of South Florida



Zhengrui(Jeffrey) Jiang
Iowa State University

Local Arrangement Co-Chairs:



Yasin Ceran
Santa Clara University



Haibing Lu
Santa Clara University



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University of Virginia



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University of Notre Dame

Webmaster:



Saurav Chakraborty
University of South Florida



KEYNOTE



Dr. Phil Mui

*Senior Vice
President,
Technology
Salesforce*

Prof. Mui's Biography

Phil Mui, Ph.D., is a Senior Vice President of Technology in Salesforce. He has responsibilities over the company's technology strategy, architecture long range plans, and strategic projects. Before Salesforce, Phil led the product development of Google Analytics and the digital transformation of Acxiom + LiveRamp.

Outside work, Phil is active as board members / advisors in various non-profits and for-profit organizations. He coaches his local elementary school's Math Olympiad team. He receives his SB, MEng, PhD in EECS from MIT, and an MPhil in Management Studies as a Marshall Scholar at Oxford. His Ph.D. dissertation was on a Computational Model of Trust and Reputation at the MIT Lab for Computer Science (the current CSAIL).



KEYNOTE



Dr. Arun Rai

*Regents' Professor;
J. Mack Robinson
Chair of IT-Enabled
Supply Chains
and Process
Innovation and
James A.
Harkins III Professor
in Information
Systems
Robinson College of
Business, Georgia
State University*

Prof. Rai's Biography

Arun Rai holds a permanent appointment as Regents' Professor of the University System of Georgia and the Robinson and Harkins Chairs at the Robinson College of Business, Georgia State University. He has held visiting appointments at leading universities in Australia, Hong Kong, France, Germany and Slovenia. He is currently serving as the editor-in-chief of MIS Quarterly, widely regarded as the premier scholarly journal in information systems.

Dr. Rai was named a fellow of the Association for Information Systems in recognition of his outstanding contributions in research, teaching and service to the information systems discipline, and received the INFORMS Information Systems Society Distinguished Fellow Award for outstanding intellectual contributions to the information systems discipline. He is a four-time recipient of the Robinson College of Business Faculty Recognition Award for Research and has received the Robinson College of Business Faculty Recognition Awards for Teaching and Service.

Dr. Rai's research has examined how organizations can leverage digital innovations in their strategies, inter-organizational relationships and processes, and how innovative systems can be successfully developed, implemented and utilized to address business and societal problems. His studies have been sponsored by major organizations across sectors (e.g., IT, healthcare, automotive, transportation, manufacturing, financial services, government) as well as by thought leadership forums and government agencies. Dr. Rai has more than 200 peer-reviewed publications including 100+ peer-reviewed journal articles and is ranked among the top scholars in the information systems discipline's most prestigious journals. His work has been extensively cited in the information systems discipline and also in the top journals of other disciplines including accounting, computer science, education, healthcare, marketing, operations management, strategic management and psychology. He has also given more than 150 invited talks and keynotes to both academic and industry audiences.

Dr. Rai has chaired 30 doctoral dissertations and served as committee member on another 30. Several of his former students are in senior leadership positions at their universities and in the profession. He has developed programs and taught courses at the master's and doctoral levels related to IT and strategy, supply chain management, technology and innovation, theory development, and research methods. He has also developed and delivered executive education programs for major organizations and has consulted with C-level executives in various sectors on digital innovation at their organizations.

Dr. Rai co-founded the Robinson College of Business' Center for Process Innovation, an interdisciplinary research center on digital innovation that promotes industry-university partnerships. He has served as the Ph.D. program director for CEPRIN's (previously eCommerce Institute) interdisciplinary Ph.D. program since its inception in 2000. He served three consecutive three-year terms as chair of the Robinson College of Business promotion and tenure committee. He has been involved in the research community in a variety of service roles, including senior editor and associate editor for premier journals such as Information Systems Research, MIS Quarterly and Management Science and panelist for the National Science Foundation. He is currently serving on the board of directors of Apollo Hospitals Delhi (one of the largest hospitals in India) and Apollo Health and Lifestyle Limited (one of the largest players in the healthcare retail segment in India).



Program Committee

First Name	Last Name	Organization
Diya	Abraham	Virginia Commonwealth University
Gediminas	Adomavicius	University of Minnesota
Manish	Agrawal	University of South Florida
Ramah Al	Balawi	University of Illinois at Chicago
Kemal	Altinkemer	Purdue University
Laura	Amo	SUNY at Buffalo
Manmohan	Aseri	Carnegie Mellon University (CMU)
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Yash	Babar	University of Minnesota
Akhilesh	Bajaj	The University of Tulsa
Victor	Benjamin	Arizona State University
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Kaushal	Chari	University of South Florida
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Min	Chen	Florida International University
Roger	Chiang	University of Cincinnati
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Thomas	Frick	Rotterdam School of Management, Erasmus University



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Tomer	Geva	Tel Aviv University
Hossein	Ghasemkhani	Purdue University
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Xue	Guo	Temple University
Xu	Han	Florida Atlantic University
Lin	Hao	University of Notre Dame
Wu	He	Old Dominion University
Jiangning	He	Shanghai University of Finance and Economics
Alan	Hevner	University of South Florida
Chad	Ho	George Washington University
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Jian-Ren	Hou	University of Texas at Arlington
Yuheng	Hu	University of Illinois at Chicago
Xin	Hu	Shanghai Jiaotong University
Kai Lung	Hui	HKUST
Wael	Jabr	Georgia State University
Varghese	Jacob	University of Texas at Dallas
JungJoo	Jahng	Seoul National University
Hemant	Jain	Rollins College of Business, The University of Tennessee at Chattanooga
Yonghua	Ji	University of Alberta
Monica	Johar	University of North Carolina- Charlotte
Keumseok	Kang	Florida International University
Guneet	Kaur	University of Connecticut



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Ping Fan	Ke	The Hong Kong University of Science and Technology
Vijay	Khatri	Indiana University at Bloomington
Jooho	Kim	UC Irvine
Marios	Kokkodis	Boston College
Subodha	Kumar	Temple University
Akhil	Kumar	Penn State University
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Young Jin	Lee	University of Denver, Daniels College of Business
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Yating	Li	University of Delaware
De	Liu	University of Minnesota – Twin Cities Campus
Dengpan	Liu	Tsinghua University
Dapeng	Liu	Virginia Commonwealth University
Yidi	Liu	City University of Hong Kong
Rong	Liu	Stevens Institute of Technology
Siyuan	Liu	Penn State University
Dengpan	Liu	Tsinghua University
Shen	Liu	Tsinghua University
Bowen	Lou	Wharton School, University of Pennsylvania
Yixin	Lu	George Washington University



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First Name	Last Name	Organization
Jifeng	Luo	Shanghai Jiaotong University
Xiao	Ma	University of Houston
Rakesh	Mallipeddi	Texas A&M University
Michael	Mannino	University of Colorado Denver
Mayukh Mayukh	Majumdar	Texas A&M University
Edward	McFowland III	University of Minnesota – Twin Cities Campus
Zixuan	Meng	University of Washington
Syam	Menon	The University of Texas at Dallas
Sabyasachi	Mitra	Georgia Institute of Technology
Jiahui	Mo	Nanyang Technological University
Radha	Mookerjee	University of Texas at Dallas
Sridhar	Narasimhan	Georgia Institute of Technology
Suvendu	Naskar	Indian Institute of Management Calcutta
Tingting	Nian	UC Irvine
Rema	Padman	Carnegie Mellon University (CMU)
Balaji	Padmanabhan	University of South Florida
Gautam	Pant	The University of Iowa
Jinsoo	Park	Seoul National University
Jeffrey	Parsons	Memorial University of Newfoundland
Praveen	Pathak	University of Florida
Raymond	Patterson	University of Calgary
Jing	Peng	University of Connecticut
Selwyn	Piramuthu	University of Florida
Nicolas	PRAT	Essec Business School
Anwida	Prompijit	University of California, Irvine
Liangfei	Qiu	University of Florida
Sudha	Ram	University of Arizona
Narayan	Ramasubbu	University of Pittsburgh
Ram	Ramesh	SUNY at Buffalo
Sundarraaj P	Rangaraja	Indian Institute of Technology, Madras



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Jyotishka	Ray	Cal State East Bay
Jacquelyn Rees	Ulmer	Iowa State University
Rishika	Rishika rishika	North Carolina State University
Rahul Kumar	Roy	Indian Institute of Management Calcutta
Nachiketa	Sahoo	Boston University
Sagar	Samtani	University of South Florida
Raghu	Santanam	Arizona State University
Pallab	Sanyal	George Mason University
Sumit	Sarkar	Utdallas
Soumya	Sen	University of Minnesota
Anup	Sen	Indian Institute of Management Calcutta
Arunabha	Sen	Texas A&M University
Pankaj	Setia	University of Arkansas
Ben	Shao	Arizona State University
Harpreet	Singh	UT Dallas
Kumar	Sirugudi	Arizona State University, Tempe Campus
Sanjukta	Smith	University at Buffalo, The State University of New York
Franck Loic Soh	Noume	University of Arkansas
Yicheng	Song	University of Minnesota
Veda	Storey	Georgia State University
Vijayan	Sugumaran	Oakland University
Romilla	Syed	University of Massachusetts – Boston
Yinliang	Tan	Tulane University
Giri Kumar	Tayi	State University of New York at Albany
Manoj	Thomas	Virginia Commonwealth University
Jin	Tian	Tianjin University
Monica Chiarini	Tremblay	College of William and Mary
Arvind	Tripathi	University of Auckland
Alexander	Tuzhilin	New York University (NYU)
Konstantina	Valogianni	IE Business School
Debra Vander	Meer	Florida International University



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Padmal	Vitharana	Whitman School of Management, Syracuse University
Gang	Wang	University of Delaware
Jingguo	Wang	University of Texas at Arlington
Lei	Wang	Pennsylvania State University
Xi	Wang	Central University of Finance and Economics
Le	Wang	Nanyang Technological University
Hayden	Wimmer	Georgia Southern University
Carson	Woo	University of British Columbia
Nan	Xiao	University of Texas Rio Grande Valley
Ling	Xue	Georgia State University
Lu	Yan	Indiana University
Mochen	Yang	University of Minnesota
Mochen	Yang	Indiana University at Bloomington
Lisa	Yeo	UC Merced
Junming	Yin	University of Arizona
Victoria	Yoon	Virginia Commonwealth University
Dajun	Zeng	University of Arizona
Julie	zhang	University of Massachusetts, Lowell
John	Zhang	Arizona State University
Guoying	Zhang	Midwestern State University
Jie	Zhang	University of Texas at Arlington
John	Zhang	ASU
Jingjing	Zhang	Indiana University at Bloomington
Huimin	Zhao	University of Wisconsin-Milwaukee
Kang	Zhao	University of Iowa
Keran	Zhao	University of Illinois at Chicago
Dmitry	Zhdanov	Georgia State University
Eric	Zheng	UT Dallas
Rong	Zheng	Hong Kong University of Science and Technology (HKUST)
Haonan	Zhong	University of Massachusetts at Boston



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Lina	Zhou	UMBC
Wenqi	Zhou	Duquesne University
Tongxin	Zhou	Foster School of Business, University of Washington
Wenjun	Zhou	University of Tennessee – Knoxville
Jiali	Zhou	Hong Kong University of Science and Technology (HKUST)
Harry	Zhu	University of Massachusetts at Lowell
Hangjung	Zo	Korea Advanced Institute of Science & Technology
Zhiya	Zuo	University of Iowa



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Program Schedule

28th WORKSHOP ON INFORMATION TECHNOLOGIES AND SYSTEMS (WITS 2018)

December 16-18, 2018, Santa Clara, CA, USA

Sunday, December 16

12:30 pm	Registration starts at Hyatt Place San Jose
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	Wine Tasting at Savannah–Chanelle Vineyards Location: 23600 Big Basin Way, Saratoga, CA 95070 (RSVP Mandatory).
12:30 – 3:30 pm	Group 1: Pick up from Hyatt Place San Jose at 12:30 pm, return to Hyatt at 3:30 pm
2:30 – 5:30 pm	Group 2: Pick up from Hyatt Place San Jose at 2:30 pm, return to Hyatt at 5:30 pm

5:30 – 8:00 pm	Reception and Registration at Hyatt Place San Jose
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Monday, December 17

	Shuttle from Hyatt to SCU (7:00 am, 7:40 am, 8:20 am, 9 am, 9:40 am, 10:40 am, 11:40 am)	
	Shuttle from SCU to Hyatt (7:20 am, 8:00 am, 8:40 am, 9:20 am, 10:10 am, 11:10 am)	

8:00 – 8:30 am	Continental Breakfast & Registration	Lucas Hall 2nd Floor
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8:30 – 8:40 am	Welcome Remarks and Logistics	Lucas Hall Bank of America Commons
8:40 – 9:30 am	Industry Keynote Speech by Dr. Phil Mui, Senior VP of Salesforce	

9:30 – 9:45 am	Coffee Break	Lucas Hall 2nd Floor
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9:45 – 11:00 am	Session 1A: Industry Presentations	206 Lucas Hall
	<i>Session Chair: Jingjing Li, University of Virginia</i>	
	Discovering Domain Specific Dialog Acts: A Quantitative and Unsupervised Method <i>Sabina Tomkins, University of California, Santa Cruz,</i> <i>Anbang Xu, Haibin Liu, Zhe Liu, Yufan Guo, Vibha Sinha, Rama Akkiraju, IBM Almaden Research Center</i>	
	I Know You'll Be Back: Interpretable New User Clustering and Churn Prediction on a Mobile Social Application <i>Carl Yang, University of Illinois, Urbana Champaign,</i> <i>Xiaolin Shi, Jie Luo, Snap Inc,</i> <i>Jiawei Han, University of Illinois, Urbana Champaign</i>	
	Lessons We Learned from Applying Machine Learning to Adversarial Environment <i>Xiang Sheng, Facebook</i>	



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9:45 – 11:00 am **Session 1B: Healthcare I**

207 Lucas Hall

Session Chair: Michael V. Mannino, University of Colorado Denver

Extended Similarity Measures to Predict Trauma Patient Mortality
Joel Fredrickson, Michael Mannino, Omar Alqahtani, Farnoush Banaei-Kashani
University of Colorado Denver

Multiple Disease Prediction: A Multi-label Learning Approach Using Deep Generative Learning and Biomedical Knowledge
Lin Qiu, Vaibhav Rajan, Bernard C. Y. Tan, National University of Singapore

A Deep Learning Architecture for De-identification of Patient Notes: Implementation and Evaluation (**Best Paper Nominee**)
Kaung Khin, Philipp Burckhardt, Rema Padman, Carnegie Mellon University

Session 1C: Data Mining

209 Lucas Hall

Session Chair: Ken Peffers, University of Nevada Las Vegas

A Bivariate Dynamic Latent Difference Score Model for Longitudinal Data Analysis
Youyou Tao, Loyola Marymount University,
Katherine Masyn, Georgia State University,
Abhay Nath Mishra, Iowa State University,
Jeong-Ha Oh, Mark Keil, Georgia State University

Don't Classify, Translate: Multi-Level E-Commerce Product Categorization Via Machine Translation
Maggie Yundi Li, Stanley Kok, National University of Singapore,
Liling Tan, Rakuten Institute of Technology

On the Self-Consistency of K-Nearest Neighbors Technique
Gediminas Adomavicius, University of Minnesota,
Jingjing Zhang, Indiana University,
Meizi Zhou, University of Minnesota

11:00 – 11:15 am Coffee Break

Lucas Hall 2nd Floor

11:15–12:30 pm **Session 2A: Industry Presentations**

206 Lucas Hall

Session Chair: Jingjing Li, University of Virginia

Towards Real-time 3D Reconstruction using Consumer UAVs
Qiaosong Wang, eBay Inc.

Probabilistic Autocomplete Suggestion Ranking with Localization and Personalization in Geosearch
Xugang Ye, Zijie Qi, Dropbox

Visual Product Recognition – Bing Ads VPR API to Monetize Product Images
Jia He, Tim Wang, Hao Wang, Sravya Popuri, Keng-hao Chang, Bruce Zhang, Microsoft

Session 2B: Review and Recommendation

207 Lucas Hall

Session Chair: Harry Wang, University of Delaware

How Does Online Review Manipulation Influence Sales? Evidence from the Hotel Industry



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11:15–12:30 pm *Cheng Nie, Iowa State University,
Zhiqiang (Eric) Zheng, Sumit Sarkar, University of Texas at Dallas*

How Would you Rate it? Anchoring Effects and User Personality Traits in Recommender Systems

*Konstantin Bauman, Temple University,
Tamilla Triantoro, Quinnipiac University*

Blockchain-Enabled Data Sharing Recommender Systems

*Xiaoying Xu, South China University of Technology,
Kaushik Dutta, University of South Florida,
Chunmian Ge, South China University of Technology*

Session 2C: Advertisement

209 Lucas Hall

Session Chair: Haiyang Feng, Tianjin University

“To Be or Not to Be” Designing L-Shape Advertising for Mobile Movie Streaming Service

*Taekyung Kim, University of Suwon,
Jihae Suh, Jaehwan Lee, Jinsoo Park, Byungjoon Yoo, Seoul National University*

The Effectiveness of Mobile Short-Message-Service Based Peak-Time Rebate Program for Household Electricity Demand Response

*Gloria JinaKim, KAIST,
Dongsik Jang, Korea Electric Power Research Institute,
Jiyong Eom, KAIST*

Budget-Constrained Ad Selection in Large-Scale Advertising Systems

*Hemant K. Bhargava, UC Davis,
Ramnik Arora, Stanford University*

12:30– 2:00 pm Lunch and Keynote Speech by Dr. Arun Rai, Georgia State University:
“Avoiding Type III Errors: Overcoming Competency Traps, Seizing New Opportunities”
Lucas Hall Bank of America Commons

2:00 – 3:15 pm **Session 3A: WITS Feeder Workshop (Smart Data Pricing)** 206 Lucas Hall
Session Chair: Soumya Sen, University of Minnesota

Turbulence in Media and Entertainment: Chaos or a New Order?

H. Bhargava, UC Davis

Duopoly Competition in Advertising-Sponsored Wi-Fi Provision

*Joshua Eberhardt, Bharath Sreenivas, Illinois Mathematics and Science Academy,
Moksh Shah, Northwestern University*

Using Neural Detection for Truthful Crowdsourced Content Evaluation

*C. Huang, The Chinese University of Hong Kong,
H. Yu, Northwestern University,
J. Huang, The Chinese University of Hong Kong,
R. Berry, Northwestern University*

Sponsored Data: Smarter Data Pricing with Incomplete Information

*X. Mei, The Hong Kong Polytechnic University
L. Qiu, University of Florida*



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2:00 – 3:15 pm **Session 3B: Health Care II** **207 Lucas Hall**
Session Chair: Kang Zhao, University of Iowa

Using Deep Learning to Improve Healthcare Quality and Efficiency (***Best Dissertation proposal Nominee***)

Weiguang Wang, University of Maryland

Drug-Drug Interaction Mining and Interaction Terms Extraction using Deep Learning: A Word-level Attention Bi-Directional LSTM

Zhengchao Yang, Sudha Ram, Faiz Currim, University of Arizona

Social Support and User Churn Prediction for Online Health Communities -- A Trajectory-based Deep Learning Method

Xiangyu Wang, University of Iowa,

Apoorva Joshi, FireEye, Inc.

Xun Zhou, Kang Zhao, University of Iowa

Session 3C: Dissertation Proposals **209 Lucas Hall**
Session Chair: Yuheng Hu, University of Illinois at Chicago

Health Information Exchanges: Impact on Healthcare Costs, Referral Networks, and Induced-Utility in Referral Processes (***Best Dissertation proposal Nominee***)

Saeede Eftekhari, University at Buffalo

Predicting Labor Market Competition and Employee Mobility --- A Machine Learning Approach (***Best Dissertation proposal Nominee***)

Yuanyang Liu, University of Iowa

Essays on Operational Problems in Digital Economy (***Best Dissertation proposal Nominee***)

Rakesh Mallipeddi, Texas A&M, College Station

3:15 pm Pick up from Santa Clara University to Commodore Cruise at 2394-A Mariner Square Drive, Alameda, CA, 94501

5:45 pm Cruise Boarding

6:00 – 9:00 pm Commodore Cruise Tour of San Francisco Bay

9:15 pm Pick up from Commodore Cruise back to Hyatt Place San Jose



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Tuesday, December 18

Shuttle from Hyatt to SCU (7:00 am, 7:40 am, 8:20 am, 9 am, 9:40 am, 10:40 am, 11:40 am)

Shuttle from SCU to Hyatt (7:20 am, 8:00 am, 8:40 am, 9:20 am, 10:10 am, 11:10 am)

8:00–8:15 am Registration and Networking with Coffee and Tea **Lucas Hall 2nd Floor**

8:15–9:30 am **Session 4A: Data Science Applications** **206 Lucas Hall**

Session Chair: Balaji Padmanabhan, University of South Florida

Characterizing Social TV Activity Around Televised Events: A Joint Topic Model Approach (*Best Paper Nominee*)

Yuheng Hu, University of Illinois at Chicago

Mining Reputation Effects in Citations of Scientific Publications

Moez Farokhnia, He Zhang, Balaji Padmanabhan, University of South Florida

Waiting to be Found: Using Data Science to Discover TV Programs for Public Service Announcements

Arash Barfar, University of Nevada,

Balaji Padmanabhan, University of South Florida

Session 4B: Predictive Analytics

207 Lucas Hall

Session Chair: Abhay Nath Mishra, Iowa State University

The misty crystal ball: Efficient concealing of privacy-sensitive attributes in predictive analytics

Nicolas Banholzer, Stefan Feuerriegel, ETH Zurich

Do Better Predictions Lead to Better Decisions? Insights from Predictive Policing

Oliver Dlugosch, University of Freiburg,

Tobias Brandt, Erasmus University Rotterdam,

Dirk Neumann, University of Freiburg

Patient Health Status Prediction: A Multi-State Markov Model

Youyou Tao, Loyola Marymount University,

Abhay Nath Mishra, Iowa State University,

Yichen Cheng, Georgia State University

Session 4C: Social Media & Reviews

209 Lucas Hall

Session Chair: Xianjun Geng, Tulane University

Topic-based Intervention on Social Media Network Search

Clinton Daniel, Donald Berndt, University of South Florida

How do Social Ties Influence User-Generated Content: A Dynamic Perspective

Yue Jin, Tsinghua University,

Yong Tan, University of Washington,

Jinghua Huang, Tsinghua University

How Online Reviews Interact with A Firm's Free Version Strategy

Huanhuan Cao, Zhejiang University of Technology,

Jinhu Jiang, Xi'an Jiaotong University,

Xianjun Geng, Tulane University

Online Reputational Loss Aversion: Empirical evidence from StackOverflow

Ramesh Shankar, University of Connecticut



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9:30 – 9:45 am Coffee Break

Lucas Hall 2nd Floor

9:45 – 11:00 am **Session 5A: Crowd Platforms**

206 Lucas Hall

Session Chair: Junming Yin, University of Arizona

Matching Donors to Projects on Philanthropic Crowdfunding Platforms

Yicheng Song, University of Minnesota,

Zhuoxin Li, Nachiketa Sahoo, Boston University

Investigating the Fee-Delay Relationship in Cryptocurrency Transactions: Evidence from the Bitcoin Network

Noyan Ilk, Guangzhi Shang, Florida State University,

Shaokun Fan, Oregon State University

Towards Better Learning from Crowd Labeling: A Variational Inference Approach (**Best Paper Nominee**)

Jerry Luo, Xuan Wei, Daniel Dajun Zeng, Junming Yin, University of Arizona

Session 5B: Two-Sided Platform

207 Lucas Hall

Session Chair: Pallab Sanyal, George Mason University

Meet an Emergency? An Empirical Analysis on Productivity of Taxi and Ridesharing Platforms

Yingjie Zhang, UT Dallas,

Beibei Li, Zhen (Sean) Qian, CMU

Technology Restriction and Demand Shifts in Transportation Dynamics: An Empirical Study

Kyungsun (Melissa) Rhee, University of Washington,

Jinyang Zheng, Purdue University,

Yuowei Wang, Fudan University,

Yong Tan, University of Washington

Time Preference based Cloud Resource Management

Anik Mukherjee, Sundarraj P Rangaraja, Indian Institute of Technology

Session 5C: Language Processing

209 Lucas Hall

Session Chair: Jingjing Li, University of Virginia

A Deep Learning Architecture for Psychometric Natural Language Processing

Jingjing Li, Ahmed Abbasi, Faizan Ahmad, University of Virginia,

Hsinchun Chen, University of Arizona

Aspect Extraction from Online Consumer Reviews with WordNet-Guided Continuous-Space Language Models (**Best Paper Nominee**)

Jie Tao, Fairfield University,

Lina Zhou, The University of North Carolina at Charlotte,

Conor Feeney, Fairfield University

Predicting Complainers on Social Media: A Machine Learning Approach

Yuheng Hu, Ali Tafti, David Gal, University of Illinois at Chicago

11:00 – 11:15 am Coffee Break

Lucas Hall 2nd Floor

11:15–12:30 pm Poster Slam Session

Lucas Hall 105

Session Chair: Hong Guo, University of Notre Dame

12:30 – 2:00 pm Lunch and WITS Awards

Lucas Hall Bank of America Commons



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2:00 – 3:15 pm	Session 6A: Data Mining <i>Session Chair: Carson Woo, University of British Columbia</i> Data Challenges in the Digitization Era <i>Veda C. Storey, Georgia State University,</i> <i>Carson C. Woo, University of British Columbia</i> Optimal Classification Performance Metric for Constructing Variables for Further Regression Analysis <i>Mengke Qiao, Ke-Wei Huang, National University of Singapore</i> Role of Reference Points in the Goal-directed Website: A Randomized Field Experiment <i>Qinglai He, Victor Benjamin, Yili Hong, Raghu Santanam, Arizona State University</i>	206 Lucas Hall
	Session 6B: Digital Economy <i>Session Chair: Wolfgang Ketter, Erasmus University Rotterdam</i> The Impact of Price Perception in the Dynamics of Competition in an On-Demand Economy Environment: A Differential Games Approach <i>Samayita Guha, Temple University,</i> <i>Emre Demirezen, University of Florida,</i> <i>Subodha Kumar, Temple University</i> Data Acquisition Accounting for Customer Heterogeneity <i>Xiaoping Liu, Northeastern University,</i> <i>Xiao-Bai Li, University of Massachusetts Lowell</i> Towards Efficient Energy Management: Transforming Energy Business with IT <i>Dmitry Zhdanov, Georgia State University</i> FleetPower: Creating Virtual Power Plants in Sustainable Smart Electricity Markets <i>Micha Kahlen, Erasmus University Rotterdam</i> <i>Alok Gupta, University of Minnesota</i> <i>Wolfgang Ketter, Erasmus University Rotterdam</i>	207 Lucas Hall
	Session 6C: Online Communities <i>Session Chair: Benjamin Shao, Arizona State University</i> Bursty Coordination in Online Communities <i>Lei (Nico) Zheng, Feng Mai, Stevens Institute of Technology,</i> <i>Deborah M. Gordan, Stanford University,</i> <i>Jeffrey V. Nickerson, Stevens Institute of Technology</i> Auction Parameters and Bidder Entry: Evidence from Online Outsourcing Platforms <i>Yili (Kevin) Hong, Benjamin Shao, Pei-yu Chen, Chen Liang, Arizona State University</i> Online Privacy and Information Disclosure by Consumers <i>Shota Ichihashi, Bank of Canada</i>	209 Lucas Hall
3:15 – 4:00 pm	Coffee Break / Academic Demo/Prototype	Lucas Hall 2nd Floor
4:00 – 4:45 pm	WITS General Body Meeting	Lucas Hall 107
4:45 – 6:15 pm	Shuttle from SCU to Hyatt Hotel (pick up times: 4:45 pm, 5:30 pm, 6:15 pm)	
6:45 pm	Pick up from Hyatt Hotel to Maggiano's Little Italy at Santana Row	
7:00 – 9:00 pm	Dinner at Maggiano's Little Italy at Santana Row (RSVP Mandatory)	



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Poster Session Papers

Optimal Release Strategy for the Competing Software Vendors in the Presence of Word-Of-Mouth Effect <i>Yu Wang (College of Management and Economics, Tianjin University, Tianjin P. R. China), Minqiang Li (College of Management and Economics, Tianjin University, Tianjin P. R. China), Haiyang Feng, Nan Feng (College of Management and Economics, Tianjin University, Tianjin P. R. China)</i>
Digitally Nudged: How Websites Influence Donation Behavior <i>Markus Weinmann (University of Liechtenstein), Christoph Schneider (City University of Hong Kong), Nadine Székely (University of Liechtenstein), Jan vom Brocke (University of Liechtenstein)</i>
A Machine Learning Approach to Identify Fake News and Clickbait Websites <i>R. Gopal (Indian Institute of Management, India.), H. Hidaji (University of Calgary, Canada.), S. N. Kutlu (University of Connecticut, USA.), R. A. Patterson (University of Calgary, Canada.)</i>
Topic Modeling in Twitter: An Attribute Lattice-Based Approach <i>Mojtaba Asgari (Memorial University of Newfoundland, St. John's, NL.), Jeffrey Parsons (Memorial University of Newfoundland, St. John's, NL.)</i>
Competition in Online Consumer Ratings: An Equilibrium Analysis <i>Mingwen Yang (University of Texas at Dallas, Richardson, TX), Eric Zheng (University of Texas at Dallas, Richardson, TX), Vijay Mookerjee, (University of Texas at Dallas, Richardson, TX)</i>
Impact of Collection Structures and Type of Data on Quality of User-Generated Content <i>Mahed Maddah (Florida International University), Roman Lukyanenko (HEC Montréal), Debra VanderMeer (Florida International University)</i>
Managing Externalities of Internet Security with Scoring Rules <i>Xiaofan Li, Andrew Whinston</i>
Creation of Homophilous Networks Using Simulated Annealing <i>Lev Muchnik (Jerusalem School of Business Administration, The Hebrew University of Jerusalem), Arie Jacobi (Ono Academic College, Kiryat Ono, Israel), Dylan Walker (Questrom School of Business, Boston University)</i>
A Classification Artifact to Support Mental Health Surveillance: A Comparison of Feature and Classifier Ensembles <i>Yang Gu (University of Arizona, Tucson, Arizona), Gondy Leroy (University of Arizona, Tucson, Arizona), Mihai Surdeanu (University of Arizona, Tucson, Arizona), Sydney Pettygrove (University of Arizona, Tucson, Arizona)</i>
If You Can't Measure it, You Can't Manage it <i>Arion Cheong (Rutgers Business School), Soohyun Cho (Rutgers Business School), Won Gyun No (Rutgers Business School), Miklos A. Vasarhelyi (Rutgers Business School)</i>
Persistence of Consumer Preference Biases in Recommender Systems <i>Gedaminas Adomavicius (University of Minnesota), Jesse Bockstedt (Emory University), Shawn Curley (University of Minnesota), Jingjing Zhang (Indiana University)</i>
From Head to Long Tail: Flexible Recommendation using Cosine Patterns <i>Yaqiong Wang (Carlson School of Management, University of Minnesota), Junjie Wu (School of Economics and Management, Beihang University), Zhiang Wu (Jiangsu Provincial Key Laboratory of E-Business, Nanjing University of Finance and Economic), Gediminas Adomavicius (Carlson School of Management, University of Minnesota)</i>



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Telematics Sensor Data Analytics for Sustainable Business: Transportation and Backhaul Collaboration
Sudip Bhattacharjee (School of Business, University of Connecticut), Robert Day (School of Business, University of Connecticut), Mohsen Emadikhia (School of Business, University of Connecticut)

I Know Where You Are: A Deep Learning Approach to Predict Location for Personalized Mobile Targeting

Da Xu (David Eccles School of Business, University of Utah), Xiao Fang (Lerner College of Business and Economics, University of Delaware), Paul Jen-Hwa Hu (David Eccles School of Business, University of Utah)

Utility Maximization in Physicians' Referral Networks: Model and Methodology

Saeede Eftekhari (State University of New York at Buffalo), Niam Yaraghi (University of Connecticut), Ram Gopal (University of Connecticut), Ram Ramesh (State University of New York at Buffalo)

The Price of Being Polite

Yi Wang (Rochester Institute of Technology)

Demo/Prototypes

SCNetworkViz: A Web-Based System for Interactive Visualization of Supply Chain Network

Yihong Liu (Shanghai University of Finance and Economics), Hui Fang (Shanghai University of Finance and Economics), Yao Bao (Shanghai Jiao Tong University)

Addressing the Cybersecurity Talent Gap through a Serious Games Approach with Young Adults

Laura Amo (SUNY at Buffalo), Joana Gaia (SUNY at Buffalo), Savit Aluri (SUNY at Buffalo), Jonathan Higgins (SUNY at Buffalo), David Murray (SUNY at Buffalo), Kevin Cleary (SUNY at Buffalo), Shambhu Upadhyaya (SUNY at Buffalo)

A Serious Game for Data Warehouse Maturity Concepts

Michael Mannino (University of Colorado Denver), Mohammed Khojah (King Abdul-Aziz University)

Demo: An Online Evidence-based Text Simplification Editor for Medical Text

David Kauchak (Pomona College), Gony Leroy (University of Arizona), Melissa Grueter (Pomona College)

Context-Adaptable Trigger: A New IS Paradigm and Challenge

Ji Taek Lim (Pohang University of Science and Technology), Hokyem Kim (Pohang University of Science and Technology), Injun Choi (Pohang University of Science and Technology)

Finding a Collaborative Outsourced Team: A Search System Over Social Coding Websites

Ahmad Jowhar (Ted Rogers School of Management, Ryerson University), Morteza Zihayat (Ted Rogers School of Management, Ryerson University)

PUSH: A Blockchain-based Application for Provider Facilitated Patient-to-Patient Sharing of Medical Records and Clinical Pathways for Collaborative Decision Support

Lina Bouayad (Florida International University), Hemant Jain (Rollins College of Business, The University of Tennessee at Chattanooga), Monica Tremblay (College of William and Mary), Carmelo Gaudio (Roswell Park Comprehensive Cancer Center)

Dynamic Cybersecurity Risk Score Measurement for US Public Firms

Arion Cheong (Rutgers, The State University of New Jersey), Soohyun Cho (Rutgers, The State University of New Jersey), Won Gyun No (Rutgers, The State University of New Jersey), Miklos Vasarhelyi (Rutgers, The State University of New Jersey)



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