

WITS 2021 Program

December 15-17, 2021 Hybrid Workshop

Wednesday, December 15

6:00 PM – 9:00 PM CST WITS Reception – Hybrid Networking

Thursday, December 16

8:00am – 9:00am CST Registration & Breakfast

9:00am – 10:15am CST Welcome and Academic Keynote: *Democracy and the Pursuit of Randomness* by **Ariel Procaccia**, Gordon McKay Professor of Computer Science at Harvard University

10:15am – 10:30am CST Coffee Break

10:30am -12:00pm CST Session 1a: Fairness & Social Good

1	Responsible IS by Design: A Psychology-Informed Social Connection Recommender System for Mental Health	Siyuan Liu (Pennsylvania State University); Jingjing Li (University of Virginia); Kunpeng Zhang (University of Maryland, College park); Shaojie Tang (University of Texas at Dallas)
2	Preference-Aware Planning and Operations of Electric Vehicle Charging Clusters: A Prescriptive Framework	Karsten Schroer (University of Cologne); Ramin Ahadi (University of Cologne); Thomas Y. Lee (University of California, Berkeley); Wolfgang Ketter (University of Cologne)
3	Addressing Health Inequities Using the Quantile Regression with Fairness Constraints	Young Woong Park (Iowa State University); Youyou Tao (Loyola Marymount University); Abhay Mishra (Iowa State University)
4	A Case for Humans-in-the-Loop: Decisions in the Presence of Misestimated Algorithmic Scores	Riccardo Fogliato (CMU); Maria De-Arteaga (University of Texas at Austin); Alexandra Chouldechova (CMU)

10:30am - 12:00pm CST

Session 1b: Platforms and Ecosystems

1	Investigating the Synergy in Platform-based Omnichannel Business (Best Student Paper Nominee)	Sijia Ma (Guanghua School of Management, Peking University); Fei Ren (Guanghua School of Management, Peking University)
2	App Innovation and Welfare Implications of Platform Fees in the Smartphone Market	Siddhartha Sharma (Indiana University); Amit Mehra (UTD)
3	How do gig workers trade-off between work and study?	Wen Ya Shen (Arizona State University); Victor Benjamin (Arizona State University); Raghu Santanam (Arizona State University); Christos Makridis (Stanford)
4	Platform Integration Tools Investment, Third-party Content Creation, and First-party Advantage in Bundling Businesses	Zenan Chen (University of Minnesota); Soumya Sen (University of Minnesota)

10:30am - 12:00pm CST

Session 1c: Blockchains, Cryptocurrencies, and IoT

1	Permissioned Blockchains, Transaction Fee, and Strategic Orderers: An Economic Analysis	Kai-Lung Hui (Hong Kong University of Science and Technology); Rui Shi (City University of Hong Kong); Wei T. Yue (City University of Hong Kong); J. Leon Zhao (The Chinese University of Hong Kong, Shenzhen)
2	Operation Dumbo Drop: To Airdrop or Not to Airdrop for Initial Coin Offering Success?	Jian Li (Xi'an Jiaotong University); Xiang(Shawn) Wan (University of Florida); Kenny Cheng (University of Florida); Xi Zhao (Xi'an Jiaotong University)
3	One's Meat is Another Man's Poison: Token Incentive and Blockchain Developer Contribution	Ning Luo (University of Texas at Dallas); Eric zheng (UT Dallas); Bowen Shi (Shanghai Jiao Tong University)
4	[demo] A Protocol Prototype for Temporal Separation in Internet of Things Devices	Cecil Chua (Missouri S&T); Veda Storey (Georgia State University)

12:00pm – 1:30pm CST

Lunch and Ignite Talks

1	AI Recommendations to Support Professional Sales Decisions: A Grounded Theory Approach	Jeffrey Clement (University of Minnesota); Yuqing Ren (University of Minnesota)
2	Impression and Feature Aware Sequential Recommender	Sanjay K Krishnamurthy (IIT Madras); Nargis Pervin (IIT Madras)
3	How to Trade Thirty Thousand Products: A Wholesale Market Design for Road Capacity	Gregor Schwarz (Technical University of Munich); Martin Bichler (Technical University of Munich)
4	Electricity Pricing and Minimum Make-Whole Payments in the Presence of Non-Convexities	Johannes Knörr (Technical University of Munich); Martin Bichler (Technical University of Munich); Felipe

	and Price-Sensitive Demand	Maldonado (Technical University of Munich)
5	Retargeted versus Generic Product Recommendations: When is it Valuable to Give Retargeted Recommendations?	Xiang(Shawn) Wan (University of Florida); Anuj Kumar (University of Florida); Xitong Li (HEC Paris)
6	Solving the Social Dilemma with Equilibrium Data Harvesting Strategies: A Game-Theoretic Approach	Hyeonsik Shin (Temple University); Leila Hosseini (Temple University); Subodha Kumar (Temple University)
7	Strategy to Encourage Hedonic Content Sales: Changing Consumer Behavior	Kyeongmin Yum (Seoul National University); Jaehwan Lee (Seoul National University); Byungjoon Yoo (Seoul National University)
8	Forecasting Goal-Oriented Activities: A Deep Learning Approach Leveraging Cross-Activity Relationships	Yi Zhu (University of Minnesota); Xuan Bi (University of Minnesota); Gediminas Adomavicius (University of Minnesota); Shawn Curley (University of Minnesota)
9	Should a Multi-channel Retailer Replace the Store with a Showroom?	Jingxuan Geng (Temple University); Amit Mehra (University of Texas at Dallas); Subodha Kumar (Temple University)
10	Someone is Mimicking You: Investigating Copycats on Social Trading Platforms	Ye Liu (University of Washington); Mingwen Yang (University of Washington); Yong Tan (University of Washington)
11	Mitigating Crash Risk Propagation in Supply Chains: The Role of Business Intelligence Systems	Arun Rai (Georgia State University); Feng Tian (Hong Kong Polytechnic University); Sean Xin Xu (Tsinghua University); Wei Zhang (Georgia State University)
12	Economic Analysis of Online Subsidiary Healthcare System: A Bayesian Persuasion Approach	Zhe Wang (Tsinghua University); Dengpan Liu (Tsinghua University)
13	Subsidizing the Advertisers' Data Acquisition in Targeted Advertising	Wangsheng Zhu (The University of Texas at Dallas); Vijay Mookerjee (The University of Texas at Dallas); Shaojie Tang (The University of Texas at Dallas)
14	Corporate social responsibility policy and accessibility implementation of e-commerce for people with disabilities: Theory and practice (Dissertation)	Harel Chait (Business school, Bar Ilan University)
15	Fairness in Machine Learning Algorithm in Consumer Lending	Arindam Ray (University of South Florida); Balaji Padmanabhan (University of South Florida)
16	Understanding Divisive Social Media Discourse as Threat to Domain Self-Esteem and Knowledge Inertia	Arturo H. Cano Bejar (National Tsing Hua University); Soumya Ray (National Tsing Hua University)
17	Evaluating the Impact of Computerized Auctions	Charu Naithani (Indian Institute of Management

	on Price Discovery (Dissertation)	Lucknow)
18	The Interplay between Information Systems Legitimacy and Multiple Dominant Logics (Dissertation)	Shiya Cao (Worcester Polytechnic Institute)
19	Essays on Artificial Intelligence and the Future of Knowledge Work (Dissertation)	Zanele T Munyikwa (MIT Sloan School of Management)

1.30pm – 3:00pm CST

Session 2a: Customer Analytics

1	Acquiring Transaction Data for Customer Analytics	Xiaoping Liu (Northeastern University); Xiaobai Li (University of Massachusetts Lowell)
2	Choice-Aware User Engagement Modeling and Optimization on Social Media	Saketh Reddy Karra (University of Illinois at Chicago); Theja Tulabandhula (University of Illinois at Chicago)
3	Modeling Lengthy Behavioral Log Data for Customer Churn Management	Daehwan Ahn (University of Pennsylvania); Dokyun Lee (Boston University); Kartik Hosanagar (University of Pennsylvania)
4	Capturing Behavioral Dynamics in Video Games: A Recurrent Marked Point Process Approach	Zisu Wang (University of Arizona); Junming Yin (Carnegie Mellon University); Katherine Feng (The Hong Kong Polytechnic University)

1.30pm – 3:00pm CST

Session 2b: Big Data Insights

1	Learning Individual Social Determinants of Health from Location Big Data	Meghanath Macha (Carnegie Mellon University); Beibei Li (Carnegie Mellon University); Natasha Zhang Foutz (University of Virginia)
2	Building Analytics Resilience: A Big Data Empowered Reinforcement Learning Approach	Jingjing Li (University of Virginia); Jingyuan Yang (George Mason University); Yuan Qu (Rutgers University)
3	Does Access to Information Technology Resources Reduce Rise in Regional Unemployment Amidst Global Disasters? Insights from COVID-19 in the United States	Leting Zhang (Temple University); Taha Havakhor (Temple University); Rajiv Sabherwal (University of Arkansas)
4	Impediment of Infodemic on Pandemic Policy Efficacy: Insights from Location Big Data	Natasha Z Foutz (University of Virginia); Beibei Li (Carnegie Mellon University); Xiaobin Shen (Carnegie Mellon University)

1.30pm – 3:00pm CST

Session 2c: Privacy and Fraud Detection

1	Privacy-Preserving Credit Risk Prediction with Social Network Data	Hongzhe Zhang (University of Delaware); Xiao Fang (University of Delaware)
2	Leverage Disclosure Change Trajectories to Detect Financial Frauds (Best Student Paper Nominee)	Jujun Huang (Stevens Institute of Technology); Rong Liu (Stevens Institute of Technology)
3	Impact of Data Privacy Regulations on Recommender Systems Performance (Best Student Paper Nominee)	Meizi Zhou (University of Minnesota); Yicheng Song (University of Minnesota); Gediminas Adomavicius (University of Minnesota)
4	Pricing and Privacy Compensation Mechanisms for Personal Data Markets	Brian Birkhead (Numerous Ltd.); Ashkan Eshghi (University of Calgary); Ram Gopal (Warwick Business School); Hooman Hidaji (University of Calgary); Raymond Patterson (University of Calgary)

3:00pm – 3:15pm CST

Coffee Break

3:15pm – 4:45pm CST

Session 3a: Deep Learning

1	Is Doctor Review Useful? A Deep Learning-Assisted Analysis of Online Health Consultation Service	Bin Zhang (Texas A&M University); Yongcheng Zhan (California Polytechnic State University); Jiang Wu (Wuhan University)
2	Building a BERT-based QA System from a CQA Dataset: Detecting Gender Bias	Jihae Suh (Seoul National University of Science & Technology); Sol Jin (Seoul National University); Xu Lian (Seoul National University); Hanearl Jung (Seoul National University); Jinsoo Park (Seoul National University)
3	Learning Faces to Predict Matching Probability in an Online Dating Market	Soonjae Kwon (KAIST College of Business); Sung-Hyuk Park (KAIST College of Business); Gene Moo Lee (University of British Columbia); Dongwon Lee (HKUST)
4	Correcting the Unobserved Confounding Bias by BERT-Control Variable Model (Best Paper Nominee)	Mengke QIAO (University of Science and Technology of China); Kewei HUANG (NUS)

3:15pm – 4:45pm CST

Session 3b: Statistical Methodology

1	Aggregating Histograms for Machine Learning	Syam Menon (The University of Texas at Dallas); Abhijeet Ghoshal (University of Illinois–Urbana Champaign); Sumit Sarkar (The University of Texas at Dallas)
2	Leveraging Expert Consistency to Improve Algorithmic Decision Support (Best Paper Nominee)	Maria De-Arteaga (University of Texas at Austin); Artur Dubrawski (CMU); Alexandra Chouldechova (CMU)
3	A Non-parametric Machine Learning Model for Asynchronous Time Series	Zheng Zhang (University of Tennessee Knoxville); Wenjun Zhou (University of Tennessee Knoxville)
4	Covariate Balanced Contextual Multi-Armed Bandits	Wangcheng Yan (Tongji University); Wenjun Zhou (University of Tennessee Knoxville)

3:15pm – 4:45pm CST

Session 3c: Recommender Systems

1	Exploring Consumer Trajectories in Recommender System: A Deep Reinforcement Learning Approach (Best Student Paper Nominee)	Pan Li (New York University); Alexander Tuzhilin (New York University)
2	Exploit or Explore? How Users React to Different Types of Recommendations	David Bergman (University of Connecticut); Sule Nur Kutlu (University of Connecticut); Raymond Patterson (University of Calgary); Jing Peng (University of Connecticut)
3	Characterizing Recommender Systems with User Fatigue Awareness	Yunjuan Wang (Johns Hopkins University); Tengpeng Ma (University of Illinois at Chicago); Theja Tulabandhula (University of Illinois at Chicago)
4	Measuring Counterfactual Fairness of Recommendation Systems: An Identifiable Causal Model	Shangkun Che (Tsinghua University); Hongyan Liu (Tsinghua University); Xiaojie Mao (Tsinghua University)

4:45pm – 5:00pm CST

Break

5:00pm – 6:00pm CST

Poster Session

7:00pm – 10:00pm CST

WITS Dinner

Friday, December 17

8:00am – 9:00am CST

Breakfast

9:00am – 10:15am CST

Industry Keynote: *Friends Don't Let Friends Deploy Black-Box Models: The Importance of Intelligibility in Machine Learning* by **Rich Caruana**, senior principal researcher at Microsoft Research

10:15am – 10:30am CST

Coffee Break

10:30am – 12:00pm CST

Session 4a: Interpretable AI

1	An Interpretable Deep Learning Approach to Understand Health Misinformation Transmission on YouTube (Best Paper Nominee)	Jiaheng Xie (University of Delaware); Yidong Chai (Hefei University of Technology); Xiao Liu (Arizona State University)
2	Towards Interpretable Programmatic Marketing via Deep Reinforcement Learning	Yicheng Song (University of Minnesota); Wenbo Wang (HKUST); Song Yao (Washington University in St. Louis)
3	Learning Interpretable and Significant Topics from Text Data for Empirical Research (Best Paper Nominee)	Xiaoping Liu (Northeastern University); Xiaobai Li (University of Massachusetts Lowell)
4	Interpretable Retail Item Recommendations Using Topic Modeling and Word Embeddings	Sambit Tripathi (University of Massachusetts Lowell); Xiaobai Li (University of Massachusetts Lowell)

10:30am – 12:00pm CST

Session 4b: Online Communities & Innovation

1	Does Crowdfunding Spur Innovation? The Impact of Kickstarter on US Patent Applications	Wanci Yuan (HKUST); Kai-Lung Hui (Hong Kong University of Science and Technology); Jing Wang (HKUST)
2	Impact of spam bot on code acceptance in self-organizing communities	B Veeresh Thummadi (Lero, University of Limerick)
3	Predicting Innovation Through Topical Structure Discovery	Junho Yoon (University of Iowa); Gautam Pant (University of Iowa); Shagun Pant (University of Iowa)
4	The Effect of Learning Machines on Online Community Governance	Lei Zheng (Stevens Institute of Technology); Feng Mai (Stevens Institute of Technology); Bei Yan (Stevens Institute of Technology); Jeffrey Nickerson (Stevens Institute of Technology)

10:30am – 12:00pm CST

Session 4c: Dissertation

1	Three Essays on Emerging Technologies, Consumer Behavior, and Market Demand	Chenshuo Sun (New York University)
2	Multi-Faceted Consumer Preferences: Incorporating Unexpectedness and Cross-Domain Information into Design of Recommender System	Pan Li (New York University)
3	The Economic Value of Algorithmic Product Recommendation Systems	Xiang(Shawn) Wan (University of Florida)
4	Three Essays on The Economics of Information Security	Leting Zhang (Temple University)

12:00pm – 1:30pm CST

Lunch and Awards Ceremony

1:30pm – 3:00pm CST

Session 5a: Communities and Feedback

1	Does Real-Time Feedback Matter? A Simulation Study to Link Individual and Organizational Performance	Roman Rietsche (University of St. Gallen); Stephan Aier (University of St.Gallen); Michael Rivera (Temple University)
2	Examining Effects of Constructive Versus Destructive Criticism on Knowledge Contribution Pattern in Online Knowledge Communities	Anqi Xu (Bentley University); Bo Wen (University of Utah); Paul Hu (University of Utah)
3	Jumpstarting Online Interactions to Promote Smoking Cessation: Analyzing the Role of Seed Users in an Online Health Community	Xiangyu Wang (University of Iowa); Kang Zhao (University of Iowa); Michael S. Amato (Truth Initiative; Mayo Clinic College of Medicine and Science); Cassandra A. Stanton (Westat); Jonathan Shuter (Albert Einstein College of Medicine); Amanda L. Graham (Truth Initiative; Mayo Clinic College of Medicine and Science)
4	To Give, Or To Seek Feedback, That Is The Question: A Empirical Study of Solicited and Unsolicited Real-time Feedback Quality	Guohou Shan (Temple University); Konstantin Bauman (Temple University); Michael Rivera (Temple University)

1:30pm – 3:00pm CST

Session 5b: Graphs and Networks

1	A Theory-Driven Graph Representation Learning Method for Improving Environmental Impact Assessment	Buomsoo (Raymond) Kim (University of Arizona); Kyuhan Lee (Arizona State University); Sudha Ram (University of Arizona)
2	Firm Profiling and Competitiveness Assessment: A Heterogeneous Occupation Network based Approach	Hao Zhong (ESCP Business School); Chuanren Liu (The University of Tennessee Knoxville)
3	Lowering Chronic Disease Treatment Costs through Graph Analysis of Comorbidities	James Christopher Westland (University of Illinois at Chicago)
4	Characterizing Network Interference with Network Motifs and Machine Learning	Yuan Yuan (Purdue University)

1:30pm – 3:00pm CST

Session 5c: Advertising & E-Commerce

1	Information Design of Advertising Attribution on E-commerce Platforms	Zizheng Liu (Tsinghua university); Subodha Kumar (Temple University); Dengpan Liu (Tsinghua University)
2	Carrot or Stick? An Economic Analysis of Online Ad Fraud Deterrence	Min Chen (George Mason University); Subodha Kumar (Temple University); Abhishek Ray (George Mason University)
3	Rewarded Advertising and Mobile User Engagement: A Large-Scale Field Experiment	Buomsoo (Raymond) Kim (University of Arizona); Wei Chen (University of Arizona); Sudha Ram (University of Arizona)
4	Information Congruence of Multimodal Previews and Online Video Success: Evidence from YouTube	Eunsol Cho (New York University); Jaeung Sim (KAIST College of Business); Jiyong Eom (KAIST); Daegon Cho (KAIST)

3:00pm – 3:15pm CST

Coffee break

3:15pm – 4:15pm CST

Editors' Panel with Martin Bichler, Balaji Padmanabhan, Olivia R. Liu Sheng, Param Vir Singh, and Maytal Saar-Tsechansk (Moderator)

4:30pm – 5:30pm CST

WITS general body meeting and conclusion

Sponsors

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