

Program: 2020 INFORMS Data Science Workshop

Saturday, November 7, 2020

[For instructions on navigating the INFORMS Virtual Conference, click here \(video\)](#)

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| | DS01 Editorial Panel Session (live) https://cattendee.abstractsonline.com/meeting/9022/Session/3481 | |
| | (Joint panel with the Data Mining and Decision Analytics Workshop) | |
| 9:00 AM | Moderator: Maytal Saar-tsechansky (UT Austin), associate editor at Management Science and ISR. | |
| to | | |
| 10:00 AM | Panelists: <ul style="list-style-type: none"> • Paul Brooks (VCU), area editor at INFORMS Journal on Computing • Anindya Ghose (NYU), department editor at Management Science • Balaji Padmanabhan (USF), associate editor at Management Science and MISQ • Ram Ramesh (SUNY Buffalo), area editor at INFORMS Journal on Computing. • Galit Shmueli (National Tsing Hua University), inaugural EIC at INFORMS Journal on Data Science. (Introduction to IJDS: https://drive.google.com/file/d/1QZ3HGgDSXOGcMpgPJY7WUCYcmvsO6Z2r/view) | |
| 10:00 AM | Break | Break |
| | DS02 Panel Session on "Technology and Balance in the Time of COVID-19" (live) https://cattendee.abstractsonline.com/meeting/9022/Session/3482 | |
| | (Joint panel with CIST) | |
| 10:30 AM | Moderator: Ahmed Abbasi, Joe and Jane Giovanini Professor, University of Notre Dame. | |
| to | | |
| 11:30 AM | Panelists: <ul style="list-style-type: none"> • Ritu Agarwal - Distinguished University Professor, Interim Dean, and the Robert H. Smith Dean's Chair of Information Systems at the Robert H. Smith School of Business, University of Maryland, College Park. • Yael Grushka-Cockayne - Senior Associate Dean for Professional Degree Programs, and Altec Styslinger Foundation Bicentennial Chaired Professor, Darden School of Business, University of Virginia. • Vijay Mahajan - John P. Harbin Centennial Chair in Business, Professor of Marketing, University of Texas at Austin. • Jason Williamson - Vice President of Oracle for Startups and Oracle for Research, and Member of the Board of Visitors at North Carolina Central University's School of Business. | |

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| 11:30 AM | DS03 Recommender Systems https://cattendee.abstractsonline.com/meeting/9022/Session/3483 | DS04 Statistical Learning Methods https://cattendee.abstractsonline.com/meeting/9022/Session/3484 |
| | Audience Come and Go: Learning Dynamic Representations to Recommend Live Streaming Rooms (Best paper nominee) Ge Gao, Hongyan Liu (Full presentation) | Designing Topic Models for Better Statistical Inference Xiaoping Liu, Xiaobai Li (Full presentation) |
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| | Towards Measuring Algorithmic Interpretability John Lalor, Hong Guo (Short presentation) | Design and Analysis of Switchback Experiments Jinglong Zhao, Iavor Bojinov, David Simchi-Levi (Short presentation) |
| | Customizable Career Path Recommendation with Multi-Criteria Stochastic Optimization Pengzhan Guo, Zeyang Ye, Keli Xiao, Hengshu Zhu, Wei Zhu (Full presentation) | Information Theoretic Ising Graph Convolutional Networks for Multivariate Time Series Forecasting (Best student paper nominee) Joseph Dunbar, Olivia Sheng (Full presentation) |
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| | Recommendation with Attribute-aware Product Networks: A Representation Learning Model Guannan Liu, Liang Zhang, Junjie Wu, Xiao Fang (Short presentation) | Joint Bottom-Up Method for Hierarchical Time-Series: Application to Australian Tourism Nicolo Bertani, Ville Satopaa, Shane Jensen (Short presentation) |
| | Longitudinal Impact of Preference Biases on Recommender Systems' Performance (Best student paper nominee) Gediminas Adomavicius, Jingjing Zhang, Meizi Zhou (Full presentation) | Maximum Feasibility Estimation Sungil Kim (Full presentation) |
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| Approx. 12:40 PM | Zoom Session for Additional Q&A and Break https://zoom.us/j/98669493636?pwd=QWh6d09Ea3JBdFpoQ0xMNDlFV2ZTZz09 | Zoom Session for Additional Q&A and Break https://zoom.us/j/97502052911?pwd=OXN6ck1zd3pDaTUyd2JDYVZBWIbpdz09 |

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| 1:00 PM | DS05 Financial Prediction https://cattendee.abstractsonline.com/meeting/9022/Session/3485 | DS06 Bias and the Blurring Human/AI Boundary https://cattendee.abstractsonline.com/meeting/9022/Session/3486 |
| | Relation-based Screening of Targets in Venture Capital Investment: A Knowledge Graph Approach Ruiyun XU, Hailiang Chen, J Leon Zhao (Full presentation) | Can AI Innovate? An Interpretable Generative Model for Patents (Best student paper nominee) Zhaoqi Cheng, Dokyun Lee, Prasanna Tambe (Full presentation) |
| | Peek into the Future: Understanding Corporate Narrative Information Disclosure with Multi-task Learning Yu Zhu, Xiao Liu, Olivia Sheng (Short presentation) | Uncovering Latent Biases in Text: Method and Application to Peer Review Emaad Manzoor, Nihar Shah (Short presentation) |
| | Deep learning for financial distress prediction considering individual effect and complex system (Best student paper nominee) NohYoon Seong, Kihwan Nam, Byungtae Lee (Full presentation) | Better than Humans? AI challenge in Creative Tasks: Randomized Field Experiment on AI Recommender Systems Jooyoung Kim, NohYoon Seong, Kihwan Nam (Full presentation) |
| | Exploring Predictive Features from Text-based Information for Stock Movement during Corporate Events Ziqian Song, Patrick Fan, Edward A. Fox (Short presentation) | Biased Programmers? Or Biased Data? A Field Experiment in Operationalizing AI Ethics Bo Cowgill, Fabrizio Dell'Acqua, Samuel Deng, Daniel Hsu, Nakul Verma, Augustin Chaintreau (Short presentation) |
| | Predicting stock movements based on financial news with systematic group identification NohYoon Seong, Kihwan Nam, Byungtae Lee (Full presentation) | Augmented Fairness: An Interpretable Model Augmenting Decision-Makers' Fairness (Best paper nominee) Tong Wang, Maytal Saar-Tsechansky (Full presentation) |
| Approx. 2:10 PM | Zoom Session for Additional Q&A and Break https://zoom.us/j/98669493636?pwd=QWh6d09Ea3JBdFpoQ0xMNDlFV2ZTZz09 | Zoom Session for Additional Q&A and Break https://zoom.us/j/97502052911?pwd=OXN6ck1zd3pDaTUyd2JDYVZBWlBpdz09 |

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| 2:30 PM | DS07 Deep Learning Methods https://cattendee.abstractsonline.com/meeting/9022/Session/3487 | DS08 Social Media and Crowdfunding https://cattendee.abstractsonline.com/meeting/9022/Session/3488 |
| | Relaxed Multivariate Bernoulli Distribution and Its Applications to Deep Generative Models Xi Wang, Junming Yin (Full presentation) | Uncertainty Prediction for Crowdfunding Projects: A Multi-Label Attention based Text-CNN Approach Guohou Shan, Konstantin Bauman, Sunil Wattal (Full presentation) |
| | Learning Bayesian Nash Equilibria in Auction Games Stefan Heidekrueger, Paul Sutterer, Nils Kohring, Martin Bichler (Full presentation) | Learning from the Curve: Predicting Successful Projects using Functional PCA (Best Paper Nominee) Xinxue Qu, Zifeng Zhao (Full presentation) |
| | Personalized Training Set – A New Problem and Algorithm Tomer Geva, Inbal Yahav (Full presentation) | Bridging Classification and Visualization for Persuasion Detection on an Online Discussion Platform Derya Ipek Eroglu, Onur Seref, Michelle Seref (Short presentation) |
| | Adapting Deep Neural Networks with an Efficient Multiobjective Evolutionary Framework (Best paper nominee) Maria Baldeon Calisto, Susana Lai-Yuen (Full presentation) | Driving User Engagement with Social Media Images Vamsi Kanuri, Christian Hughes (Short presentation) |
| Approx. 3:40 PM | Zoom Session for Additional Q&A and Break https://zoom.us/j/98669493636?pwd=QWh6d09Ea3JBdFpoQ0xMNDlFV2ZTZz09 | Customer Engagement Prediction on Social Media: A Novel Graph Neural Network Method with Attention Mechanism Tengmeng Ma, Yuheng Hu, Yingda Lu, Siddhartha Bhattacharyya (Full presentation) |

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| 4:00 PM | DS09 Data Science and Health https://cattendee.abstractsonline.com/meeting/9022/Session/3489 | DS10 Data Science Applications https://cattendee.abstractsonline.com/meeting/9022/Session/3490 |
| | Beating the Clock with MedCrawl: A Social Listening Platform for Health 2.0 Brent Kitchens, Ahmed Abbasi, Jennifer Claggett (Full presentation) | Data-driven Dynamic Pricing and Ordering with Perishable Inventory in a Changing Environment N. Bora Keskin, Yuexing Li, Jing-Sheng Song (Full presentation) |
| | A framework for optimizing COVID-19 testing policy using a Multi Armed Bandit approach Hagit Grushka - Cohen, Raphael Cohen, Bracha Shapira, Jacob Moran-Gilad, Lior Rokach (Full presentation) | Anchoring-Aware Matrix Factorization Konstantin Bauman, Tamilla Triantoro (Full presentation) |
| | Data-Driven Demand Management for Hospitals during Pandemics: Forecasting COVID-19 Admissions based on Population Mobility and Social Vulnerability Arindam Ray, Kimia Keshanian, Wolfgang Jank, Kaushik Dutta, Matthew Mullarkey (Short presentation) | Precision Coupon Targeting with Dynamic Customer Triage Chuanren Liu, Wenxiang Zhu (Full presentation) |
| | Talk More about Yourself: A Data-Driven Extended Theory of Reasoned Action for Online Health Communities Xi Wang, Xing Tong, Yushan Zhu, Zhiya Zuo (Short presentation) | |
| Approx. 5:00 PM | Zoom Session for Additional Q&A and Break https://zoom.us/j/98669493636?pwd=QWh6d09Ea3JBdFpoQ0xMNDlFV2ZTZz09 | Effects of Analytics Academic Programs on Local Analytics Job Markets Yuanyang Liu, Wei Zheng, Melissa Bowers (Short presentation) |
| | | Zoom Session for Additional Q&A and Break https://zoom.us/j/97502052911?pwd=OXN6ck1zd3pDaTUyd2JDYVZBWlBpdz09 |
| | End of the workshop. Award winners will be announced via emails. | |