

## Employment

- 2020-present Assistant Professor in the Department of Information, Risk and Operations Management at the McCombs School of Business at The University of Texas at Austin
- Core member in the Machine Learning Laboratory at The University of Texas at Austin
  - Research affiliate at the Misinformation & AI at The University of Texas at Austin
  - Research affiliate at the MIT Media Lab
- 2024-present Courtesy Faculty in the School of Information at The University of Texas at Austin

## Education

- Ph.D. Massachusetts Institute of Technology (MIT), Cambridge, MA, USA**  
2017-2020 MIT Media Lab, Human Dynamics Group
- Master of Science Massachusetts Institute of Technology (MIT), Cambridge, MA, USA**  
2013-2016 Computer Science at Electrical Engineering and Computer Science Department
- Master of Science Massachusetts Institute of Technology (MIT), Cambridge, MA, USA**  
2013-2016 Transportation Engineering at Civil and Environmental Engineering Department

## Journals

- [1] Junyu Cao\* and **Yan Leng\***. Adaptive Acquisition Tree for Recommendations with Optimality Guarantees on Short-form Video Platforms. Accepted to *Management Science*.
- [2] **Yan Leng** and Drew Dimmery. Calibration of Heterogeneous Treatment Effects in Random Experiments. *Information Systems Research* (2024).
- [3] Lei Wang, Kemi Ding, **Yan Leng**, Xiaoqiang Ren and Guodong Shi. Private Nash Equilibrium Seeking in Quadratic Network Game. *IEEE Transactions on Control of Network Systems* (2024).
- [4] **Yan Leng**, Xiaowen Dong, Esteban Moro, and Alex Pentland. Long Range Social Influence in Phone Communication Network. *Information Systems Research* (2023).
- [5] **Yan Leng**, Tara Sowriraja, Yujia Zhai, and Alex Pentland. Measuring Social Influence Within and Across Multi-dimensional Homophilous Communities. *IEEE Transactions on Knowledge and Data Engineering* (2023).
- [6] Jahani<sup>†</sup>, E., Gallagher<sup>†</sup>, N., Merhout<sup>†</sup>, F., Cavalli<sup>†</sup>, N., Guilbeault<sup>†</sup>, D., **Leng<sup>†</sup>, Y.**, & Bail<sup>†</sup>, C. A. An Online Experiment During the 2020 US–Iran Crisis Shows that Exposure to Common Enemies Can Increase Political Polarization. *Scientific Reports* (2022).
- [7] **Yan Leng\***, Dominiquo Santistevan\*, and Alex Pentland. Understanding Collective Regularity in Human Mobility as a Familiar Stranger Phenomenon. *Scientific Reports* (2021).
- [8] **Yan Leng**, Yujia Zhai, Shaojing Sun, Yifei Wu, Jordan Selzer, Sharon Stover, Anfan Chen, Hezhao Zhang, and Ying Ding Analysis of Misinformation During the COVID-19 Outbreak in China: Cultural, Social and Political Entanglements. *IEEE Transactions on Big Data* (2021).
- [9] **Yan Leng**, Haris Koutsopolous, and Jinhua Zhao. Leveraging Individual and Collective Regularity to Profile and Segment User Locations from Mobile Phone Data. *ACM Transactions on Management Information Systems (TMIS)* (2021).
- [10] Dhaval Adjodah, **Yan Leng**, Shi Kai Chong, P. M. Krafft, Esteban Moro, and Alex Pentland. Accuracy-Risk Trade-Off Due to Social Learning in Crowd-Sourced Financial Predictions. *Entropy* (2021).
- [11] **Yan Leng**, Yehonatan Yella, Rodrigo Ruiz, and Alex Pentland. Contextual Centrality: Going Beyond Network Structure. *Scientific Reports* (2020).

- [12] Xiaobing Liu, Xuedong Yan, Feng Liu, Rui Wang, and **Yan Leng**. A Trip-specific Model for Fuel Saving Estimation and Subsidy Policy Making of Carpooling Based on Empirical Data. *Applied Energy* (2019).
- [13] Shaokuan Chen, **Yan Leng**, Baohua Mao, and Shuang Liu. Integrated Weight-based Multi-criteria Evaluation on Transfer in Large Transport Terminals: A Case Study of the Beijing South Railway Station. *Transportation Research Part A: Policy and Practice* (2014).

\* Equal contribution.

† Equal contribution. Authorship order was randomized.

## Refereed conference proceedings

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- [1] Xue Yu, Muchen Li, **Yan Leng**, Renjie Liao. Learning Latent Structures in Network Games via Data-Dependent Gated-Prior Graph Variational Autoencoders. *International Conference on Machine Learning (ICML)*, 2024.
- [2] Emanuele Rossi, Federico Monti, **Yan Leng**, Michael Bronstein and Xiaowen Dong. Learning to Infer Structures of Network Games. *International Conference on Machine Learning (ICML)*, 2022.
- [3] **Yan Leng**, Xiaowen Dong, and Alex Pentland. Learning Quadratic Games on Networks. *International Conference on Machine Learning (ICML)*, 2020.

## Revisions

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- [1] Christina Jeong, Jason Chan, **Yan Leng**, and Yue Guo. The Role of Online Socialization at the Workplace. Second-round major revision at *Information Systems Research*.
- [2] **Yan Leng** (lead author), Rodrigo Ruiz, Xiao Liu. Geometric Deep Learning based Recommender System and An Interpretable Decision Support System. First-round major revision at *Information Systems Research*.
- [3] **Yan Leng**\* and Yuan Yuan\*. Do LLM Agents exhibit social behaviors? First-round major revision at *Information Systems Research*.
- [4] Sandro Lera† and **Yan Leng**†. Beyond Pairwise Network Interactions: Implications for Information Centrality. First-round major revision at *Information Systems Research*.
- [5] Binwu Wang†, **Yan Leng**†, Guang Wang, and Yang Wang. FusionTransNet for Smart Urban Mobility: Spatiotemporal Traffic Forecasting Through Multimodal Network Integration. First-round major revision at *Management Science*.
- [6] **Yan Leng**, Yunxin Sang, and Ashish Agarwal. Reduce Preference Disparity Between LLMs and Humans: Calibration to Compose Human-like Ensembles. First-round major revision at *Marketing Science*.
- [7] **Yan Leng** and Ashish Agarwal. Are Spatial Neighbors Complements or Substitutes? Discovering a Visits-based Local Market Structure. First-round reject & resubmit at *Marketing Science*.
- [8] **Yan Leng**. Can LLMs Mimic Human-Like Mental Accounting and Behavioral Biases. First-round reject & resubmit at *Marketing Science*.

\* Equal contribution.

† Equal contribution. Authorship order was randomized.

## Working papers

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- [1] **Yan Leng**, Yijun Chen, Xiaowen Dong, Junfeng Wu, and Guodong Shi. Social Interaction Leakages from Public Behavioral Data: A Diagnostic and Differential Privacy Framework.
- [2] Junyu Cao\* and **Yan Leng**\*. Network-enabled Sequential Data Acquisition for High-dimensional Recommender Systems.

- [3] Junyu Cao\* and **Yan Leng\***. Learning to Optimize Data Quality for Crowdsourcing Labor Markets: A Human-Algorithm-Collaborative Framework. Won INFORMS ISS Cluster Best Paper Award.

\*Equal contribution.

## Research awards and grants

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- October 2024 Best Paper Award at Informs Data Science Workshop.
- April 2024 OpenAI Researcher Access Program (\$5,000).
- Oct 2023 - Aug 2025 National Institutes of Health (NIH)'s AIM-AHEAD Consortium Development Program (won a joint \$1 million grant with Prof. Ying Ding, Yifan Peng, Watkins Craig, and David Hodge).
- Nov 2023 UT Austin Research & Creative Grants (\$9,860).
- Oct 2023 McCombs Research Excellence Grant (\$10,000).
- Oct 2023 Research Grant from Herb Kelleher Entrepreneurship Center (\$5,000).
- May 2023 Texas Global Faculty Research Seed Grants (\$10,000).
- March 2023 McCombs Research Excellence Grant (\$10,000).
- Feb 2022 - Aug 2024 National Science Foundation (NSF) CRII Award.
- Oct 2022 2022 INFORMS ISS Cluster Best Paper Award.
- Dec 2021 Marketing Science Institute Grant Award.
- June 2021 Second prize in INFORMS Revenue Management and Pricing Data-driven Challenge (2021).
- March 2021 McCombs Research Excellence Grant (\$10,000).
- Sep 2018 Russel Sage Foundation Grant Award (\$7,899).
- Nov 2016 MIT IDEAS Global Challenge Grant (\$5,000).
- Nov 2016 MIT Sandbox Innovation Fund (\$1,000).
- Aug 2016 Harvard Sustainability Grant (\$1,000).

## Teaching awards

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- April 2024 2023-2024 Trammell/CBA Foundation Teaching Award for Assistant Professors.
- April 2024 McCombs BBA Faculty Honor Roll.
- Dec 2023 McCombs BBA Faculty Honor Roll.
- May 2021 McCombs BBA Faculty Honor Roll.