Yan Leng

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personal website

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 UT Austin
- Affiliated faculty at Oden Institute for Computational Engineering and Sciences at UT Austin
- Research affiliate at the Misinformation & AI at UT 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.
2017-2020
Massachusetts Institute of Technology (MIT), Cambridge, MA, USA
MIT Media Lab, Human Dynamics Group

Master of Science
2013-2016
Massachusetts Institute of Technology (MIT), Cambridge, MA, USA
Computer Science at Electrical Engineering and Computer Science Department

Master of Science
2013-2016
Massachusetts Institute of Technology (MIT), Cambridge, MA, USA
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†, E., Gallagher†, N., Merhout†, F., Cavalli†, N., Guilbeault†, D., **Leng**†, **Y.**, & Bail†, 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 Strover, 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

[1] **Yan Leng** and Trung Nguyen. Latent Neural Coupling of Risk and Time Preferences in LLMs Mirrors Human Biases. *EC '25: Proceedings of the 25th ACM Conference on Economics and Computation*, 2025.

[2] **Yan Leng**. Can LLMs Mimic Human-Like Mental Accounting and Behavioral Biases? *EC '24: Proceedings of the 25th ACM Conference on Economics and Computation*, 2024

[3] Xue Yu, Muchen Li, **Yan Leng**, Renjie Liao. Learning Latent Structures in Network Games via Data-Dependent Gated-Prior Graph Variational Autoencoders. *Proceedings of the 41st International Conference on Machine Learning (ICML)*, 2024.

[4] Emanuele Rossi, Federico Monti, **Yan Leng**, Michael Bronstein and Xiaowen Dong. Learning to Infer Structures of Network Games. *Proceedings of the 39th International Conference on Machine Learning (ICML)*, 2022.

[5] **Yan Leng**, Xiaowen Dong, and Alex Pentland. Learning Quadratic Games on Networks. *Proceedings of the 37th International Conference on Machine Learning (ICML)*, 2020.

Revisions

[1] Sandro Lera† and **Yan Leng**†. Beyond Pairwise Network Interactions: Implications for Information Centrality. Conditional acceptance at *Information Systems Research*.

[2] **Yan Leng*** and Yuan Yuan. Do LLM Agents exhibit social behaviors? Second-round major revision at *Information Systems Research*.

[3] **Yan Leng** (lead author), Rodrigo Ruiz, Xiao Liu. Geometric Deep Learning based Recommender System and An Interpretable Decision Support System. Second-round major revision at *Information Systems Research*.

[4] Christina Jeong, Jason Chan, **Yan Leng**, and Yue Guo. The Role of Online Socialization at the Workplace. Third-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 *Marking Science*.

[7] **Yan Leng**, Yijun Chen, Xiaowen Dong, Junfeng Wu, and Guodong Shi. Social Interaction Leakages from Public Behavioral Data: A Diagnostic and Differential Privacy Framework. First-round major revision at *Information Systems Research*

* Equal contribution.

† Equal contribution. Authorship order was randomized.

Working papers

[1] **Yan Leng** and Trung Nguyen. Beyond Stochastic Parroting: LLMs' Human-Like Behavioral Biases Emerge from Linear Neural Representations.

[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.

[4] **Yan Leng** and Ashish Agarwal. Are Spatial Neighbors Complements or Substitutes? Discovering a Visits-based Local Market Structure.

*Equal contribution.

Research awards and grants

Oct 2023 - Aug 2025	National Institutes of Health (NIH)'s AIM-AHEAD Consortium Development Program (Received a joint $1,000,000 Grant with Prof. Ying Ding, Yifan Peng, Watkins Craig, and David Hodge).
Feb 2022 - Aug 2024	National Science Foundation (NSF) CRII Award ($154,231).
Feb, 2025	Herb Kelleher Entrepreneurship Center (HKEC) Grant ($5,000)
Feb, 2025	McCombs Research Excellence Grant ($13,400)
Jan, 2025	Best Associate Editor for the ICIS 2024 Track: Data Analytics for Business and Societal Challenges
Oct, 2024	Best Paper Award at Informs Data Science Workshop.
April 2024	OpenAI Researcher Access Program ($5,000).
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).
Oct 2022	2022 INFORMS ISS Cluster Best Paper Award.
Dec 2021	Marketing Science Institute Grant Award ($15,000).
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

April 2025	McCombs BBA Faculty Honor Roll.
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.

Professional Service

2025	Editorial Board Member, Information Systems Research
2025	Program Chair for Informs Data Science Workshop
2023, 2024	Associate Editor, International Conference on Information Systems (ICIS)
2024	Ignite (Short Talk) Session Chairs for Workshop on Information Technologies and Systems (WITS)
2020	Local Chair for Workshop on Information Technologies and Systems (WITS)
2020-	Reviewer for management journals, including Management Science, Information Systems Research, MIS Quarterly
2020-	Reviewer for computer science conferences, including NeurIPS (Neural Information Processing Systems), ICML (International Conference on Machine Learning), The Web Conference (WWW), AAAI (Association for the Advancement of Artificial Intelligence)