
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

Education

Ph.D. Massachusetts Institute of Technology (MIT), Cambridge, MA, USA
2017-2020 **Human Dynamics Group** at MIT Media Lab

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

Bachelor of Engineering Beijing (Northern) Jiaotong University, Beijing, China
2009 - 2013 **Transportation Engineering** at the Traffic and Transportation Department
Computational Mathematics at the School of Science

Journals

- [1] **Yan Leng**^{*}, Dominiquo Santistevan^{*}, and Alex Pentland. Understanding Collective Regularity in Human Mobility as a Familiar Stranger Phenomenon. *Scientific Reports* (2021). ^{*}Equal contribution.
- [2] **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).
- [3] **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).
- [4] 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).
- [5] **Yan Leng**, Yehonatan Yella, Rodrigo Ruiz, and Alex Pentland. Contextual Centrality: Going Beyond Network Structure. *Scientific Reports* (2020).
- [6] 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).
- [7] 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).

Conference proceedings

- [1] 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.
- [2] **Yan Leng**, Xiaowen Dong, and Alex Pentland. Learning Quadratic Games on Networks. International Conference on Machine Learning (ICML), 2020.

Book chapters

- [1] Bakker, Michiel A., Daoud A. Piracha, Patricia J. Lu, Keis Bejgo, Mohsen Bahrami, **Yan Leng**, Jose Balsa-Barreiro et al. Measuring Fine-grained Multidimensional Integration Using Mobile Phone Metadata: the Case of Syrian Refugees in Turkey. *Guide to Mobile Data Analytics in Refugee Scenarios*, pp. 123-140. Springer, Cham, 2019.
- [2] **Yan Leng**, Xiaowen Dong, Esteban Moro, and Alex Pentland. The Rippling Effect of Social Influence via Phone Communication Network." In *Complex Spreading Phenomena in Social Systems*, pp. 323-333. Springer, Cham, 2018.

Under review

- [1] Junyu Cao* and **Yan Leng***. Adaptive Acquisition Tree for Recommendations with Optimality Guarantees on Short-form Video Platforms. Major revision at *Management Science*. * Equal contribution.
- [2] **Yan Leng**, Xiaowen Dong, Esteban Moro, and Alex Pentland. Long Range Social Influence in Phone Communication Network. Major revision at *Information Systems Research*.
- [3] **Yan Leng** and Drew Dimmery. Calibration of Heterogeneous Treatment Effects in Random Experiments. Major revision at *Information Systems Research*.
- [4] **Yan Leng**, Tara Sowriraja and Alex Pentland. Measuring Social Influence Within and Across Multi-dimensional Homophilous Communities. Major revision at *IEEE Transactions on Knowledge and Data Engineering*.
- [5] **Yan Leng**, Rodrigo Ruiz, Xiao Liu. Geometric deep learning based recommender system and an interpretable decision support system. Reject & resubmit at *Marketing Science*.
- [6] Junyu Cao* and **Yan Leng***. Adaptive Data Acquisition for Personalized Recommender Systems with Optimality Guarantees on Short-Form Video Platforms. Reject & resubmit at *Management Science*. * Equal contribution.

Awards and honors

- Feb 2022 National Science Foundation (NSF) CRII Award.
- Dec 2021 Marketing Science Institute Grant Award.
- June 2021 Second prize in Informs Revenue Management and Pricing Data-driven Challenge (2021).
- May 2021 McCombs BBA Faculty Honor Roll (Teaching Award).
- March 2021 UT-Austin McCombs Research Excellence Grant.
- Sep 2018 Russel Sage Foundation Grant Award.
- Nov 2016 MIT IDEAS Global Challenge.
- Nov 2016 MIT Sandbox Innovation Fund.
- Aug 2016 Harvard Sustainability Grant.

Teaching

- Fall 2020 MIS304 Introduction to problem solving and programming (average rating 4.75/5). Won IROM faculty honor roll teaching award.

Invited talks

- 2022 **Learning to infer structures of network games** at *Deep Exploration of non-Euclidean Data with Geometric and Topological Representation Learning* by Banff International Research Station.
- 2021 **Interpretable recommender system With heterogeneous information: a geometric deep learning perspective** at *ICLR Geometrical and Topological Representation Learning workshop*, University of Pittsburgh.

- 2019, 2020, 2021 **Learning strategic interaction from individual actions: A game-theoretic approach** at the *Northwestern Institute on Complex Systems at Northwestern University, Machine Learning in Finance Workshop by Columbia University, Alan Turing Institute, University of Washington Data Science Seminar, Carnegie Mellon University*.
- 2020 **Analysis of misinformation during the COVID-19 outbreak in China: cultural, social and political entanglements** at the *IDeaS Center at Carnegie Mellon University, UT Austin Disinformation Group at the Good Systems*.
- 2019, 2020 **Collective behaviors on networks** at *C2Smart Center at New York University, and Summer Institute in Computational Social Science at Oxford*.
- 2019 **Observational causal inference with network information** at *Graph Exploitation Symposium by MIT Lincoln Lab*.
- 2018 **Social Bayesian decision-making** on the *52nd Conference on Information Sciences and Systems (CISS) 2018*.

Services

- Organized events Local chair for WITS (2021), Summer Institute of Computational Social Science (Beijing, 2021), Computational Social Science for Impact (CSS4Impact) (2020), Summer Institute of Computational Social Science (Boston, 2019).
- Referee for management venues Management Science, Information Systems Research, MIS Quarterly, ACM Transactions on Management Information Systems, ICIS, CIST, HICSS.
- Referee for CS venues NeurIPS, ICML, ICLR, IEEE Transactions on Big Data.
- Program committee KDD Conference Workshop on Data-driven Humanitarian Mapping (2020,2021), INFORMS Workshop on Data Science (2020, 2021).