

# Beibei Li

Associate Professor (with Tenure) in IT and Management, Heinz College

Courtesy Appointment with Tepper School of Business

Courtesy Appointment with School of Computer Science

Carnegie Mellon University

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## Professional Employment

- **Carnegie Mellon University**  
*Associate Professor with Tenure* 2021.7 - Now  
*Associate Professor* 2019.7 – 2021.6  
*Anna Loomis McCandless Chair* 2015.11 - Now  
*Assistant Professor* 2012.9 – 2019.6
- **Summer Intern, Microsoft Research, Redmond, WA** 2008.6 - 2008.8  
*Intern at Microsoft Research search team*

## Education

**Ph.D. (with distinction)**, Information Systems, Stern School of Business, New York University, 2008-2012.

- Thesis: “Analyzing Consumer Behavior on Product Search Engines: Interplay between Search and Social Media.”
- *INFORMS ISS Nunamaker-Chen Best Dissertation Award*
- *ACM SIGMIS Best Doctoral Dissertation Award*
- *Herman E. Krooss Best Doctoral Dissertation Award*

**M.S.**, Computer Science, University of Kentucky, Lexington KY, 2005-2007.

**B.S./M.S. (with distinction)**, Computer Science (minor: fashion design), Donghua (East China) University, Shanghai, 2005.

## Academic Honors & Awards

- INFORMS Information Systems Research (ISR) Best Paper of the Year Award, Runner-up. 2021.
- Best Paper Award in the Digital Innovation Track. ICIS 2021.
- Amazon Faculty Research Award. 2020.
- Best Overall Conference Paper Award. ICIS 2019.
- Best Paper Award. WITS 2019.
- Facebook Faculty Research Award. 2019.
- INFORMS Information System Society (ISS) Sandy Slaughter Early Career Award. 2019.
- INFORMS Information Systems Research (ISR) Best Paper of the Year Award, Runner-up. 2019.
- Three NSF Awards with over \$3M funding in total. 2016-2022.
- LinkedIn Economic Graph Challenge Award. 2018.
- Anna Loomis McCandless Chair at Carnegie Mellon University. 2015.
- Junior Marketing Researcher Award. Big Data Marketing Conference. 2015.
- Adobe Faculty Research Award. 2015.
- Google Faculty Research Award. 2015.
- INFORMS ISS Nunamaker-Chen Dissertation Award. 2013.
- Herman E. Krooss Doctoral Dissertation Award. 2013.
- ACM SIGMIS Doctoral Dissertation Award. 2012.
- Best Theme Paper Award. ICIS 2012.

- Best Paper Award, International World Wide Web Conference, WWW 2011.
- Selected to the ICIS Doctoral Consortium. Dec. 2011, Shanghai.
- Selected to the Columbia-Duke-UCLA Workshop on Quantitative Marketing and Structural Econometrics (QuantCamp). Duke University, Aug. 2010.
- ICDE PhD Workshop Fellowship Award. 2010.
- Best Paper Award, 20th Annual ECU Symposium in the Mathematical, Statistical and Computer Sciences, Mar, 2006, Richmond, KY.
- Bronze Medal for the Microsoft Cup Software Design Competition, 2004, Shanghai.
- Bronze Medal for the ACM International Collegiate Programming Contest, 2002, Shanghai.
- Talented Undergraduate Award (1st out of approximately 4000 students), 2003, Shanghai.

## Research Grants

- NBER Research Grant on Economics of Transportation (co-PI). \$60,671. 2022.
- Grant from Block Center for Technology and Society (PI). \$76,706. 2022.
- NSF Award on Civic Innovation Challenge, First Stage (co-PI) \$50,000. 2021.
- Grant from R. K. Mellon Foundation (co-PI). \$150,000. 2020.
- Grant from Block Center for Technology and Society (PI). \$60,000. 2020.
- Amazon Faculty Research Grant (PI). \$70,000. 2020.
- Facebook Economic Opportunity and Digital Platforms Research Grant (PI). \$50,000. 2019.
- NSF Award on Future of Work at the Human-Technology Frontier (co-PI). \$2.5M. 2019-2022.
- NSF Award on Social, Behavior and Economics (co-PI). \$285,080. 2019-2021.
- NSF Award on Smart and Connected Communities (PI). \$230,751. 2016-2019.
- Hillman Foundation and Metro21 Institute (co-PI). \$60,000. 2018-2019.
- PNC Center for Financial Services Innovation Research Grant (PI). \$5,000. 2016-2018.
- Berkman Faculty Award. Carnegie Mellon University (PI). \$4,100. 2016.
- Google Faculty Research Award (PI). \$66,000. 2015.
- Adobe Faculty Research Award (PI). \$50,000. 2015.
- Marketing Science Institute Grant (co-PI). \$20,000. 2015.
- Traffic21 Faculty Research Grant. Carnegie Mellon University (co-PI). \$24,030. 2015-2016.
- Berkman Faculty Award. Carnegie Mellon University (PI). \$5,100. 2015.
- PNC Center for Financial Services Innovation Research Grant (PI). \$20,000. 2013-2015.
- WCAI-Wharton Customer Analytics Initiative Research Opportunity Grant Award (PI). 2012-2013.

## Teaching

- **Instructor in Heinz College, Carnegie Mellon University**
  - Advanced Business Analytics (Master in Business Analytics Core, Avg Rating 4.1/5) 2019–Now
  - Business Intelligence and Data Mining with SAS (Master Level, 5-year Avg Rating 4.4/5) 2012–Now
  - Capstone Project (Master Level, 5-year Avg Rating 5/5) 2012–Now
  - Data Warehousing (Master Level) 2012–2017
- **Instructor in Stern School of Business, New York University**
  - Information Technology in Business and Society (Undergraduate Core Course) Summer 2012

## Journal Publications

1. Deep Reinforcement Learning for Sequential Targeting. 2022. Forthcoming at *Management Science*. (with Wen Wang, Xueming Luo, Xiaoyi Wang)
2. Consumer Health in the Digital Age. 2021. Forthcoming at *Journal of the Association for Consumer Research*. (with Peggy Liu, Jeffrey Inman, Charlene Wong, Nathan Yang)
3. Empowering Patients Using Smart Mobile Health Platforms: Evidence From A Randomized Field Experiment. 2021. Forthcoming. *MIS Quarterly*. (with Anindya Ghose, Xitong Guo, Yuanyuan Dang)

4. Learning Individual Behavior Using Sensor Data: The Case of GPS Traces and Taxi Drivers. 2020. Forthcoming. *Information Systems Research*. (with Yingjie Zhang and Ramayya Krishnan)  
- *ISR Best Paper of the Year Award, Runner-up*.
5. A Tangled Web: Should Online Review Portals Display Fraudulent Reviews? *Information Systems Research*, 31(3), 950-971. 2020. (with Uttara Ananthkrishnan and Michael D. Smith)
6. Mobile Targeting Using Customer Trajectory Patterns. *Management Science*, 65(11), 4951-5448. 2019. (with Anindya Ghose and Siyuan Liu)
7. Modeling Consumer Footprints on Search Engines: An Interplay with Social Media. *Management Science*, 65(3), 955-1453. 2019. (with Anindya Ghose and Panos G. Ipeirotis)
8. When the Bank Comes to You: Branch Network and Customer Multi-Channel Banking Behavior. *Information Systems Research*. Forthcoming. 2019. (with Vibhanshu Abhishek, Dan Geng and Mi Zhou)
9. Personalized Mobile Targeting with User Engagement Stages: Combining Structural Hidden Markov Model and Field Experiment. *Information Systems Research*, 30(3), 711-1105. 2019. (with Yingjie Zhang, Xueming Luo, Xiaoyi Wang)
10. Copycats versus Original Mobile Apps: A Machine Learning Copycat Detection Method and Empirical Analysis. *Information Systems Research*, 29(2), 273-291. 2018. (with Quan Wang and Param Vir Singh)  
- *ISR Best Paper of the Year Award, Runner-up*.
11. Examining the Impact of Contextual Ambiguity on Search Advertising Keyword Performance: A Topic Model Approach. 2018. *MIS Quarterly*. (with Vibhanshu Abhishek and Jing Gong)
12. Examining the Impact of Ranking on Consumer Behavior and Search Engine Revenue. *Management Science*, 60(7), 1632-1654. 2014. (with Anindya Ghose and Panagiotis G. Ipeirotis)
13. Designing Ranking Systems for Hotels on Travel Search Engines by Mining User-Generated and Crowd-Sourced Content. *Marketing Science*. 2012(31), 493-520. (with Anindya Ghose and Panagiotis G. Ipeirotis)
14. Everywhere and at All Times: Mobility, Consumer Decision-Making, and Choice. 2018. *Customer Need and Solutions*. 5(1), 15-27. (with Nicholas H. Lurie, Jonah Berger, Zoey Chen, Hongju Liu, Charlotte H. Mason, David M. Muir, Grant Packard, Joseph Pancras, Ann E. Schlosser, Baohong Sun, Rajkumar Venkatesan).
15. Using Online Geotagged and Crowdsourced Data to Understand Human Offline Behavior in the City: An Economic Perspective. 2017. *ACM Transactions on Intelligent Systems and Technology (ACM TIST) Special Issue on Urban Intelligence*. Forthcoming. (with Yingjie Zhang and Jason I. Hong. 5-Year Impact Factor: 10.47, ranked No.1 in all ACM journals and No.2 in all computer science-related journals including ACM, IEEE, and Springers journals)
16. The Impact of Car Specifications, Prices and Incentives for Battery Electric Vehicles in Norway: Choices of Heterogeneous Consumers. *Transportation Research Part C: Emerging Technologies*. 2016. (with Yingjie Zhang, Sean Qian, and Frances Sprei. Top journal in transportation research, 5-Year Impact Factor: 3.631)

### Selected Working Papers

1. Perils of Location Tracking? Personalized and Interpretable Privacy Preservation in Consumer Mobile Trajectories. 2022. Under 2<sup>nd</sup> round review at *Information Systems Research*. (with Meghanath MY, Natasha Foutz, Anindya Ghose)
2. Trading Privacy for the Greater Social Good: How Did America React During COVID-19? 2022. Under 2<sup>nd</sup> round revision at *Management Science*. (with Anindya Ghose, Meghanath M Y, Chenshuo Sun, Natasha Zhang Foutz)
3. Ridesharing for Public Safety? Evidence from NYC Terrorist Attacks. 2022. Under 2<sup>nd</sup> round revision at *Information Systems Research*. (with Yingjie Zhang, Sean Qian)
4. Profit vs. Equality? The Case of Financial Risk Assessment and A New Perspective of Alternative Data.

2022. Under 2<sup>nd</sup> round revision at *MIS Quarterly*. (with Tian Lu, Yingjie Zhang)
5. Has Ridehailing Exacerbated Inequalities in Local Spending? Analysis of Ridehailing Usage and Consumption Patterns in 2012-2016. 2022. Under Review at *Information Systems Research*. (with Zhe Zhang)
  6. Nudge to Refill? Modeling Consumer Health Risk with Graph Convolutional Networks for Online Pharmaceutical Targeting. 2022. Under 1<sup>st</sup> round revision at *Management Science*. (with Wen Wang, Xueming Luo)
  7. The Interplay Between Individual Mobility, Health Risk, and Economic Choice: A Holistic Model for COVID-19 Policy Intervention. 2022. (With Zihao Yang, Ramayya Krishnan)
  8. Learning Social Determinants of Health from Consumer Location Trajectories: Healthcare Risk and Equity. 2022. (with Meghanath Macha, Natasha Foutz)
  9. The Effect of Reduced Geospatial Mobility on Mental Health During COVID-19: Evidence from Linked Individual-Level GPS Data and health Service Records. 2022. (with Naveen Basavaraj, Sagar Baviskar, Lee Branstetter, Seth Chizeck, Edward Mulvey)
  10. Resilience of the U.S. Gig Economy during the COVID-19 Pandemic: Insights from Location Big Data. 2022. (with Naveen Basavaraj, Natasha Foutz)
  11. Impediment of Infodemic on Disaster Policy Efficacy. 2022. (with Xiaobin Shen, Natasha Foutz)
  12. Uncovering the Source of Machine Bias. 2022. (with Xiyang Hu, Tian Lu, Yan Huang)

## Conference Publications

- Nudge to Refill? Modeling Consumer Health Risk with Graph Convolutional Networks for Online Pharmaceutical Targeting. In *Proceedings of the International Conference on Information Systems (ICIS)* 2021. (with Wen Wang, Xueming Luo)
  - ***Kauffman Best Student Paper Award Finalist***
- Empower Audience Creativity Using Multi-Modal Video Analytics: Evidence From TED Talks. In *Proceedings of the International Conference on Information Systems (ICIS)* 2021. (with Wen Wang)
  - ***Best Paper Award in Digital Innovation Track***
  - ***Best Overall Conference Paper Award Finalist***
- Resilience of the U.S. Gig Economy during the COVID-19 Pandemic: Insights from Location Big Data. In *Proceedings of the International Conference on Information Systems (ICIS)* 2021. (with Naveen Basavaraj and Natasha Foutz)
- Uncovering the Source of Evaluation Bias in Micro-Lending. In *Proceedings of the International Conference on Information Systems (ICIS)* 2021. (with Xiyang Hu, Yan Huang, Tian Lu)
- Trading Privacy for the Greater Social Good: How Did America React During COVID-19? In *Proceedings of the International Conference on Information Systems (ICIS)*, 2020. (with Anindya Ghose, Meghanath M Y, Chenshuo Sun, Natasha Zhang Foutz)
- AI Agents for Sequential Promotions: Combining Deep Reinforcement Learning and Dynamic Field Experimentation. In *Proceedings of the International Conference on Information Systems (ICIS)*, 2020. (with Wen Wang, Xueming Luo, Xiaoyi Wang)
- Personalizing Debt Collections: Combining Reinforcement Learning and Field Experiment. In *Proceedings of the International Conference on Information Systems (ICIS)*, 2020. (with Tracy Yang, Tian Lu, Xianghua Lu)
- The Value of Alternative Data in Credit Risk Prediction: Evidence from a Large Field Experiment. In *Proceedings of the International Conference on Information Systems (ICIS)*, Munich, 2019. (with Tian Lu, Yingjie Zhang)
  - ***Best Overall Conference Paper Award***
- Geo-Targeting, Privacy, and the Rise of Consumer Location Trajectories. In *Proceedings of the International Conference on Information Systems (ICIS)*, Munich, 2019. (with Meghanath M Y, Natasha

Zhang Foutz)

- To Disguise or To Disclose? Effect of Mimicking News Articles on Sponsored Content Engagement. In *Proceedings of the International Conference on Information Systems (ICIS)*, San Francisco, 2018. (with Quan Wang)
  - **Best Paper Award in E-Business Track**
  - **Best Overall Conference Paper Award Finalist**
- An Empirical Investigation of Sales Cheating Effect in E-commerce. In *Proceedings of the International Conference on Information Systems (ICIS)*, San Francisco, 2018. (with Le Wang, Jiahui Mo)
- A Quasi-experimental Estimate of the Impact of P2P Transportation Platforms on Urban Consumer Patterns. In *Proceedings of the 23th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD)*, Halifax, NS, Canada, August 13–17, 2017. (with Zhe Zhang)
- The Impact of Mobile Adoption on Customer Omni-Channel Banking Behavior. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dublin, 2016. (with Jun Liu, Vibhanshu Abhishek)
- Using TB-Sized Data to Understand Multi-Device Advertising. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dublin, 2016. (with Quan Wang, Pengyuan Wang)
- Modeling User Engagement in Mobile Content Consumption with Tapstream Data. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dublin, 2016. (with Yingjie Zhang, Xueming Luo)
- Understanding User Economic Behavior in the City Using Large-scale Geotagged and Crowdsourced Data. *Forthcoming in Proceedings of the 25th International World Wide Web Conference (WWW)*, Montreal, Canada, April 2016. (With Yingjie Zhang and Jason Hong)
- A Tangled Web: Evaluating the Impact of Displaying Fraudulent Reviews. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dallas TX, 2015. (With Uttara Ananthakrishnan and Michael D. Smith)
  - **Best Overall Conference Paper Award Finalist**
- Digitizing Offline Shopping Behavior Towards Mobile Marketing. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dallas TX, 2015. (With Anindya Ghose and Siyuan Liu)
- Learning from the Offline Trace: A Case Study of the Taxi Industry. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dallas TX, 2015. (With Yingjie Zhang, Ramayya Krishnan)
- When the Bank Comes to You: Branch Network and Customer Multi-Channel Banking Behavior. In *Proceedings of the International Conference on Information Systems (ICIS)*, Dallas TX, 2015. (With Vibhanshu Abhishek and Dan Geng)
- Perils of Uncertainty? The Impact of Contextual Ambiguity on Search Advertising Keyword Performance. In *Proceedings of the International Conference on Information Systems (ICIS)*, New Zealand 2014. (With Vibhanshu Abhishek and Jing Gong)
- Zoom in iOS Clones: Examining the Antecedents and Consequences of Mobile App Copycats. In *Proceedings of the International Conference on Information Systems (ICIS)*, New Zealand 2014. (With Quan Wang and Param Vir Singh)
- Search Less, Find More? Examining Limited Consumer Search with Social Media and Product Search Engines. In *Proceedings of the International Conference on Information Systems (ICIS)*, Orlando 2012. (with Anindya Ghose and Panagiotis G. Ipeirotis)
  - **Best Theme Paper Award**
- Towards a Theory Model for Product Search. In *Proceedings of the 20th International World Wide Web Conference (WWW)*, Hyderabad, India, March 2011. (with Anindya Ghose and Panagiotis G. Ipeirotis)
  - **Best Paper Award**
- Designing Ranking Systems for Hotels on Travel Search Engines to Enhance User Experience. In *Proceedings of the International Conference on Information Systems (ICIS 2010)*, St. Louis, December.

(with Anindya Ghose and Panagiotis G. Ipeirotis)

## Papers in Workshops and Conference Programs

- The Interplay Between Individual Mobility, Health Risk, and Economic Choice: A Holistic Model for COVID-19 Policy Intervention. 2022. *Statistical Conference in E-Commerce Research (SCECR)*. (with Zihao Yang, Ramayya Krishnan)
- Effect of the COVID-19 Pandemic on the Composition of Gig Labor Supply. 2022. *Statistical Conference in E-Commerce Research (SCECR)*. (with Saharsh Agarwal, Uttara Ananthkrishnan)
- Credit Risking Modeling without Sensitive Features: An Adversarial Deep Learning Model for Fairness and Profit. 2022. *Statistical Conference in E-Commerce Research (SCECR)*. (with Xiyang Hu, Tian Lu, Yan Huang)
- Uncovering the Source of Machine Bias. (*INCOFMRS CIST*) 2021. (with Xiyang Hu, Tian Lu, Yan Huang)
  - **Best Student Paper Award Finalist**
- Perils of Location Tracking? Personalized and Interpretable Privacy Preservation in Consumer Mobile Trajectories. *Workshop on Information Technology and Systems (WITS)*. 2019. (with Meghanath M Y, Natasha Zhang Foutz, Anindya Ghose)
  - **Best Paper Award**
- Learning Individual Behavior Using Sensor Data: The Case of GPS Traces and Taxi Drivers. *Workshop on Information Systems and Economics (WISE)*. 2017. (with Yingjie Zhang, Ramayya Krishnan)
  - **Best Student Paper Award**
- Empowering Patients Using Smart Mobile Health Platforms: Evidence from A Randomized Field Experiment. 2017. *CODE@MIT*. (with Anindya Ghose and Xitong Guo)
- Nudging Mobile Customers with Real-Time Social Dynamics. *China India Insights Conference*. 2017. (with Anindya Ghose, Siyuan Liu)
- Bike Sharing and Car Trips in the City: The Case of Healthy Ride Pittsburgh. *Workshop on Information Technology and Systems (WITS)*. 2016. (with Konstantinos Pelechrinis, Sean Qian)
- Peer-to-Peer Transportation Platforms, Consumer Mobility, and Urban Consumption Patterns. *Workshop on Information Systems and Economics (WISE)*. 2016. (with Zhe Zhang)
- Modeling User Engagement in Mobile Content Consumption with Tapstream Data. *INFORMS Conference of Information Systems and Technology (CIST), CODE@MIT*. 2016. (with Yingjie Zhang, Xueming Luo)
- Mobile Advertising and Real-Time Social Dynamics. *INFORMS Marketing Science Conference*. 2016. (with Anindya Ghose, Siyuan Liu)
- Learning from the Offline Trace: A Case Study of the Taxi Industry. *The Symposium on Statistical Challenges in Electronic Commerce Research (SCECR)*. 2016. (With Yingjie Zhang, Ramayya Krishnan)
- When Structural Model Meets Big Data: Examining Multi-Device Attribution for Native Ads Using TB-Sized Data. (*WISE*) 2015. (with Quan Wang, Pengyuan Wang, Jimmy Yang)
- All World's a Home - Estimating Hotel Latent Quality under Airbnb Entry. (*WISE*) 2015. (With Uttara Ananthkrishnan and Michael D. Smith)
  - **Best Student Paper Award Runner-up**
- Mobile Advertising and Real-Time Social Dynamics: Evidence from a Field Experiment. *CODE@MIT*. Oct. 2015.
- A Tangled Web: The Impact of Displaying Fraudulent Reviews on Product Search Engines. *China Summer Workshop on Information Management (CSWIM)*, June 2015. Hefei, China. (With Uttara Ananthkrishnan and Michael D. Smith)
- A Tangled Web: The Impact of Displaying Fraudulent Reviews on Product Search Engines. *Winter Conference on Business Intelligence (WCBI)*, March, 2015, Salt Lake City, Utah. (With Uttara

Ananthkrishnan and Michael D. Smith)

- Understanding Impact of Urban Accessibility on Small Business Using Traffic and Human Mobility Analytics. *Workshop on Information Technology and Systems (WITS)*, December 2014. New Zealand. (With Yingjie Zhang and Jason I. Hong)
- Mobile Trajectory-Based Advertising: Evidence from a Large-Scale Randomized Field Experiment. *Workshop on Information Systems and Economics (WISE)*, December 2014. New Zealand. (With Siyuan Liu and Anindya Ghose)
- Perils of Uncertainty? The Impact of Contextual Ambiguity on Search Advertising Keyword Performance. *INFORMS Conference of Information Systems and Technology (CIST)*, November 2014, San Francisco, CA. (With Vibhanshu Abhishek and Jing Gong)
  - **Best Student Paper Award**
- Zoom in iOS Clones: Examining the Impact of Copycats on Mobile App Downloads. *INFORMS Conference of Information Systems and Technology (CIST)*, November 2014, San Francisco, CA. (With Param Vir Singh and Quan Wang)
- Perils of Uncertainty? The Impact of Contextual Ambiguity on Search Advertising Keyword Performance. *China Summer Workshop on Information Management (CSWIM)*, June 2014. (With Vibhanshu Abhishek and Jing Gong)
  - **Best Paper Award Runner-up**
- Examining the Impact of Contextual Ambiguity on Search Advertising Keyword Performance: A Topic Model Approach. *INFORMS Marketing Science Annual Conference*, June 2014, Atlanta GA. (with Vibhanshu Abhishek and Jing Gong)
- Examining the Impact of Contextual Ambiguity on Search Advertising Keyword Performance: A Topic Model Approach. *Winter Conference on Business Intelligence (WCBI)*, March, 2014, Salt Lake City, Utah. (with Vibhanshu Abhishek and Jing Gong)
- Surviving Social Media Overload: Predicting Consumer Footprints on Product Search Engines. *Workshop on Information Systems and Economics (WISE 2012)*, Orlando 2012. (with Anindya Ghose and Panagiotis G. Ipeirotis)
- Search Less, Find More? Examining Limited Consumer Search with Social Media and Product Search Engines. *INFORMS 2012, Phoenix, AZ*. (with Anindya Ghose and Panagiotis G. Ipeirotis)
- Designing Ranking Systems for Hotels on Travel Search Engines by Mining User-Generated and Crowd-Sourced Content. *FRANK M BASS UTD FORMS Conference*, Feb. 2012. Dallas, TX. (with Anindya Ghose and Panagiotis G. Ipeirotis)
- Examining the Impact of Search Engine Ranking and Personalization on Consumer Behavior: Combining Bayesian Modeling with Randomized Field Experiments. *Workshop on Information Systems and Economics (WISE 2011)*, Shanghai, December, 2011. (with Anindya Ghose and Panagiotis G. Ipeirotis)
- Designing Ranking Systems for Hotels on Travel Search Engines by Mining User-Generated and Crowd-Sourced Content, *6th bi-annual Conference on The Economics of Intellectual Property, Software and the Internet*, Toulouse, France, January 2011. (With Anindya Ghose and Panagiotis G. Ipeirotis)
- Extracting Economic Value from Online User-Generated Content: Combining Text Mining with Demand Estimation in the Hotel Industry. In Proceedings of the *32nd INFORMS Marketing Science Conference*, Cologne, Germany, June 2010. (with Anindya Ghose and Panagiotis G. Ipeirotis)
- Mining User-Generated and Crowd-Sourced Content on the Internet to Estimate Demand for Hotels. *The Sixth Symposium on Statistical Challenges in Electronic Commerce Research (SCECR 2010)*. Austin, TX, June 2010. (With Anindya Ghose and Panagiotis G. Ipeirotis)
- Improving Product Search with Economic Theory. *International Conference on Data Engineering (ICDE 2010) PhD Workshop*, Long Beach, CA, March 2010.
- The Economic Impact of User-Generated Content on the Internet: Combining Text Mining with Demand Estimation in the Hotel Industry. *Workshop on Information Systems and Economics (WISE 2009)*,

- Phoenix, 2009. (with Anindya Ghose and Panagiotis G. Ipeirotis)
- Towards Designing Ranking Systems for Hotels on Travel Search Engines: Combining Text mining with Demand Estimation in the Hotel Industry. *Workshop on Information Technology and Systems (WITS 2009)*, Phoenix, 2009. (with Anindya Ghose and Panagiotis G. Ipeirotis)
  - Stay Elsewhere? Improving Local Search for Hotels Using Econometric Modeling and Image Classification. *WebDB 2008*, in conjunction with *ACM SIGMOD/PODS 2008*, Vancouver, Canada. (with Anindya Ghose and Panagiotis G. Ipeirotis)
  - Stay Elsewhere? The Economic Impact of Location-based Hotel Features: A View from Remote Sensing Image Analysis. *Winter Conference on Business Intelligence (WCBI)*, March, 2008, Salt Lake City, Utah. (with Anindya Ghose and Panagiotis G. Ipeirotis)

## Invited Talks

- UT Austin. McCombs School of Business. Mar. 2022.
- University of Minnesota. Carlson School of Management. Feb. 2022.
- University of Rochester. Simon Business School. April 2022.
- U of Iowa. Tippie College of Business. April 2022.
- McGill University. Desautels School of Management. Jan. 2022.
- UIUC. Gies College of Business. Nov. 2021.
- UIC. School of Business. Nov. 2021.
- University of Southern California, Marshall School of Business. Oct. 2021.
- Boston College, Carroll School of Management. Oct. 2021.
- Cheung Kong Graduate School of Business (CKGSB). Aug 2021.
- University of Miami, Business School. May 2021.
- University of Arizona, Eller College of Management. Feb 2021.
- Robert H. Smith School of Business, University of Maryland. Nov. 2020.
- University of Wisconsin. Nov. 2020.
- Shanghai University of Finance and Economics. Aug. 2020.
- Harvard Business School. (March 2019)
- George Washington University. (Sept. 2019)
- Goizueta Business School (Marketing), Emory University. (April 2019)
- Southern Data Science Conference. (April 2019)
- David Eccles School of Business. University of Utah. (Rescheduled)
- National University of Singapore. (August 2019)
- Singapore Management University. (August 2019)
- Carlson School of Management, University of Minnesota. (April 2018)
- Krannert School of Management, Purdue University. (March 2018)
- W. P. Carey School of Business, Arizona State University. (Feb. 2018)
- Naveen Jindal School of Management, University of Texas at Dallas. (Oct. 2017)
- Booth School of Business, University of Chicago. (March 2016)
- Foster School of Business, University of Washington, Seattle. (April 2016)
- Google Inc. Pittsburgh. (Jan 2016)
- Tepper School of Business, Carnegie Mellon University. (Dec. 2015)
- Smeal School of Business, Penn State University. (Oct. 2015)
- Eli Broad College of Business: Michigan State University. (Oct. 2015)
- Shanghai University of Finance and Economics. (July 2015)
- School of Business (Marketing), Chinese University of HK. (July 2015)
- School of Management, Fudan University. (July 2015)
- Singapore Management University. (July 2015)



- Fox School of Business, Temple University. (May 2015)
- Rady School of Management, UC San Diego. (Mar. 2015)
- Scheller College of Business, Georgia Institute of Technology. (Oct 2014)
- McCombs School of Business, UT Austin. (Sept. 2014)
- Heinz Think BIG Event. Carnegie Mellon University. (Sept. 2014)
- Nanyang Technological University. (July 2014)
- Shanghai University of Economics and Finance. (July 2014)
- Alibaba Inc. (June 2014) Hangzhou, China.
- Singapore Management University. (June 2014)
- Heinz College Monday Seminar Series, Carnegie Mellon University. (Feb. 2014)
- Gatton College of Business and Economics, University of Kentucky. (Feb. 2014)
- Machine Learning and Social Science Seminar Series, Carnegie Mellon University. (April 2013)
- Carlson School of Management, University of Minnesota. (Nov. 2012)
- CMU Job Talk. (Nov. 2011)
- Baidu, Inc. (June 2011) Beijing, China.
- A Demo for Product Search. *Day 1: Technology Expo*, NYU. November 2010.
- The 10<sup>th</sup> Anniversary for Department of Information, Operations & Management Science (IOMS), Stern School of Business, NYU. October, 2010.
- The New York Academy of Sciences, World Trade Center, New York City, 2009, 2010.
- Microsoft Virtual Earth Award Summit, May 2008, Redmond, WA.

## Media Mentions

- **TIME** - [Inside the War on Fake Consumer Reviews](#) (07-06-2022)
- **Vox** - [Will apps like PayPal and Venmo make financial inequality worse?](#) (04-07-2021)
- **Pharmacy Times** - [Diabetes Patients' Use of Mobile Health App Found to Improve Health Outcomes, Lower Medical Costs](#) (03-03-2021)
- **ScienMag** - [Diabetes patients use of mobile health app found to improve health outcomes, lower medical costs](#) (02-24-2021)
- **Harvard Business Review** – IdeaWatch: Stop Censoring Fake Reviews. (Nov/Dec 2020)
- **Harvard Business Review** – IdeaWatch: For App Developers, Knockoffs Are a Double-Edged Sword. (May/June 2020)
- **Tirto** - [Setelah TikTok Dijegal, Terbitlah Para Peniru - Tirto.ID](#) (09-01-2020)
- **Tribune Review** - [More people willing to share location data for contact tracing, new study shows](#) (07-25-2020)
- **HWCool** - [Column: Las revisiones falsas deberían permanecer en línea, dicen los investigadores. no estoy muy seguro](#) (07-14-2020)
- **LA Times** - [Column: Fake reviews should stay online, researchers say. I'm not so sure](#) (07-02-2020)
- **Style and Polity** - [How to Handle Fraudulent Reviews on Online Portals? Study Gives Tips to Managers](#) (06-29-2020)
- **Ecommerce Next** - [Research shows that 80% of the customers trust platforms that show fake reviews](#) (06-29-2020)
- **Geek Wire** - [80% of consumers trust a review platform more if it displays fake reviews](#) (06-29-2020)
- **Retail Wire** - [Would Amazon and Google benefit from publishing fake consumer reviews?](#) (06-23-2020)
- **Health Medicine Network** - [New research says displaying fake reviews increases consumer trust in platforms by 80%](#) (06-19-2020)
- **Tech Xplore** - [How to handle fraudulent reviews on online portals? Study gives tips to managers](#) (06-11-2020)

- **Vox** - [At home with YouTube's favorite yoga teacher](#) (05-06-2020)
- **NPR** - [Stuck Inside? Here's Your TV Streaming Strategy](#) (03-19-2020)
- **Scientific American** – [Don't Kill Innovation with Excessive Regulation](#) (10-24-2019)
- **Quartz** - [Quartz Future of Finance: Revolut is tracking you](#) (10-18-2019)
- **CIO** - [Conheça alguns dos principais usos da inteligência artificial](#) (07-26-2019)
- **QR Code Press** - [Mobile tracking tech ties physical movements of shoppers to their purchasing decisions](#) (04-02-2019)
- **Harvard** - [Beibei Li on Mobile Targeting Using Customer Trajectory Patterns](#) (03-27-2019)
- **WTAX** - [New type of mobile tracking links your movements and buying choices](#) (03-26-2019)
- **Marketing Interactive** - [Precision location targeting for mobile study shows incredible effectiveness](#) (03-26-2019)
- **Tech Explorist** - [New type of mobile tracking link shoppers' physical movements, buying choices](#) (03-25-2019)
- **HNGN** - [New type of mobile tracking link shoppers' physical movements, buying choices](#) (03-25-2019)
- **National Affairs** - [Show and Tell](#) (02-24-2019)
- **PR Newswire** - [Adrealm Foundation joined by NYU, Carnegie Mellon scholars](#) (09-14-2018)
- **Science Daily** - [Imitation is the most sincere form of flattery, unless you are an app developer](#) (04-09-2018)
- **mHealthWatch** - [Health Improvement in Diabetes Patients Noted after Downloading mHealth Apps](#) (11-30-2017)
- **Business Wire** - [NYU Stern Study Shows Significant Health Improvement in Diabetes Patients after Downloading Mobile Health Applications](#) (11-16-2017)
- **The Conversation** – [Cynicism about mobile advertising is greatly misplaced](#) (08-19-2015)
- **Freakonomics** – [Does Reviewer Quality Matter?](#) (04-12-2011)
- **Knowledge@Wharton** - [The Travel Search Engine That Thinks the Way You Do?](#) (05-23-2012)

## Patents

- Apparatus, system, method and computer-readable medium for performing a product search using user-generated and crowd-sourced content. Li, B., A. Ghose, P. Ipeirotis, International Publication Number WO 2012/064661 issued May 2012.
- System, method and computer accessible medium for determining one or more effects of rankings on consumer behavior. Li, B., A. Ghose, P. Ipeirotis. 239099.US.02-32882-219651. *Pending*. 2016.

## Editorial Board

- **AE** – Management Science (2020-Now)
- **AE** – ISR (2018-Now)
- **AE** – MISQ (Ad-hoc)
- **AE** – ICIS, CIST (2015-Now)

## Synergistic Activities

- **Journal Reviewer & Grant Reviewer** – Management Science, Information Systems Research, MIS Quarterly, Marketing Science, Journal of Marketing Research, Nature, PNAS, MIT Sloan Management Review, MIT Press, Journal of Management Information Systems, Marketing Letters, Decision Support Systems, Journal of Information Economics and Policy, Journal of Computing, Transactions on Management Information Systems, Transactions on Intelligent Systems and Technology, Artificial Intelligence, IEEE Access. Hong Kong Research Grant Council, National Science Foundation.
- **Program Committee & Session Chair** – INFORMS Annual Conference 2012-2022; Workshop on Information Systems and Economics (WISE) 2012-2022; INFORMS Conference on Information Systems and Technology (CIST) 2013-2021; China Summer Workshop on Information Management

(CSWIM) 2013-2021; International Conference on Information Systems (ICIS) 2014-2021; ACM Conference on Economics and Computation (EC) 2016.

- **Conference Co-Chair** – WSDM Smart City Day Co-Chair, 2022; KDD Co-Chair, 2021; ICIS Internet-of-Things Track Co-Chair, 2020; China Summer Workshop on Information Management (CSWIM) Co-Chair, 2019; Digital Marketing and Machine Learning Conference Co-Chair, 2019, 2020; INFORMS Conference on Information Systems and Technology (CIST) Co-Chair, 2017; Structural Model Applications for Research in Technology (SMART) Co-Chair, 2014, 2015, 2017.
- **Member** – Association of Information Systems (AIS), INFORMS Information Systems Society (ISS), INFORMS Society of Marketing Science (ISMS).

### **Service to the University**

- Co-chair, undergraduate Decision Analytics and Systems (DAS) program and curriculum design committee. 2021-2022
- University Research Council. 2021-now
- University Tenure and Promotion Review Committee. 2019-2021
- Diversity, Equity and Inclusion committee at Heinz College. 2019-2021
- Co-organizer for the Heinz College faculty research seminar. 2016-2017, 2019-2020
- Faculty search committee. 2015-2016 (Stats and ML), 2018-2019 (IS), 2019-2020 (IS), 2021-2022 (Stats and ML)
- Heinz College Dean reappointment committee. 2014, 2020

### **Service Awards**

- ISR/ISS Best Reviewer of the Year. 2015.
- Management Science Service Awards. 2013, 2017, 2018, 2019.

### **Doctoral Students and Postdoc Supervision**

- Xiyang Hu (Co-Advisor. CMU, 3<sup>rd</sup> year.)
- Naveen Thotadamane Basavaraj (Co-Advisor. CMU, 3<sup>rd</sup> year.)
- Sagar Baviskar (Co-Advisor. CMU, 2<sup>nd</sup> year.)
- Zihao Yang (Co-Advisor. CMU, 2<sup>nd</sup> year.)
- Xiaobin Shen (Co-Advisor. CMU, 1<sup>st</sup> year)
- Wen Wang (Dissertation Chair. CMU, 5<sup>th</sup> year. first position: Assistant Professor at Robert H. Smith School of Business, University of Maryland)
- Meghanath M Y (Dissertation Chair. CMU PhD 2021. first position: Data Scientist at Adobe Research)
- Zhe Zhang (Dissertation Chair. CMU PhD 2019. first position: Assistant Professor at Rady School of Management UC San Diego)
- Tian Lu (Postdoc Advisor. CMU 2018-2019, first position: Assistant Professor at W. P. Carey School of Business at Arizona State University)
- Yingjie Zhang (Dissertation Chair. CMU PhD 2018. first position: Assistant Professor in Information Systems at Naveen Jindal School of Management at UT Dallas; current position: Assistant Professor in Marketing at Guanghua School of Management at Peking University)
- Cong Wang (Postdoc Co-Advisor, CMU 2019-2020, first position: Assistant Professor at Guanghua School of Management at Peking University)
- Uttara Ananthakrishnan (Dissertation Committee. CMU PhD 2018. first position: Assistant Professor in Information Systems at Foster School of Business, University of Washington at Seattle)
- Quan Wang (Dissertation Chair. CMU PhD 2018. first position: Data Scientist at LinkedIn)
- Francisco Cisternas Vera (Dissertation Committee. CMU Marketing PhD 2017. first position: Assistant Professor in Marketing at Chinese University of Hong Kong)
- Jing Gong (Dissertation Committee. CMU PhD 2016. first position: Assistant Professor in Information

Systems at Fox School of Business, Temple University)

- Sonam Samat (Dissertation Committee. CMU PhD 2016. first position: Data Scientist at Facebook)
- Jun Liu (Dissertation Committee. SMU PhD 2016. first position: Researcher at A\*STAR (Agency for Science, Technology and Research))

### **Skills & Extracurricular Interests**

- C/C++, SQL, MATLAB, R, STATA, SAS EM, Windows, Linux, HTML, JavaScript, Python.
- Language: English (Fluent) & Mandarin (Native)
- President of Department of Public Relations and Social Activity, Donghua University, 2003~2005.
- I was a Ping-Pong Champion in high school and in college.
- I play violin, and minored in fashion design in college. Before my academic life, I used to work as a part-time fashion model in Shanghai. I won Bronze Medal in the International Fashion Model Competition in 2003, Shanghai.