Negin Golrezaei

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Research Interests

Revenue Management, Machine Learning, Statistical Learning, Learning in Strategic Environments, Agentic AI, Data-Driven Optimization, Approximation Algorithms, Mechanism/Auction Design, and Game Theory.

Employment

- **Theresa Seley Associate Professor of Management Science and an Associate Professor of Operations Management (with tenure), MIT**, Cambridge, MA, July 2025 - present. [1]
- **W. Maurice Young (1961) Career Development Associate Professor (without tenure), MIT**, Cambridge, MA, July 2024 - July 2025.
- **Associate Professor (without tenure), MIT**, Cambridge, MA, July 2023 - June 2025.
- **KDD Career Development Assistant Professor in Communications and Technology, MIT**, Cambridge, MA, July 2020 - June 2023.
- **Assistant Professor, MIT**, Cambridge, MA, Sept. 2018 - June 2023.
- **Postdoctoral Researcher, Google**, New York, NY, June 2017 - June 2018.
- **Research Summer Intern, Google**, New York, NY, 2015 - 2016.

Education

- **Ph.D., University of Southern California (USC)**, Los Angeles, CA
  Data Sciences and Operations Department, Marshall School of Business
  - Thesis Title: Efficient Policies and Mechanisms for Online Platforms 2012-2017
  - Thesis Advisors: Hamid Nazerzadeh and Paat Rusmevichientong
- **M.Sc., Sharif University of Technology**, Tehran, Iran
  Electrical Engineering Department, Communications 2007-2009
- **B.Sc., Sharif University of Technology**, Tehran, Iran
  Electrical Engineering Department, Electronics 2003-2007

[1] Affiliated with the Operations Research Center and the MIT-IBM Watson AI Lab.

Grants, Awards, and Honors

1. INFORMS RMP Jeff McGill Student Paper Award (First Place) for the paper "Learning Safe Strategies for Value-Maximizing Buyers in Uniform Price Auctions," entrant: Sourav Sahoo, 2025.
2. INFORMS Michael H. Rothkopf Junior Researcher Paper Prize (Second Place) for the paper "Learning Safe Strategies for Value-Maximizing Buyers in Uniform Price Auctions," entrant: Sourav Sahoo, 2025.

- Second Place Winner of the INFORMS Data Mining Society inaugural Teaching Award for Designing and Teaching Course "15.S07 SSIM: Real-time Analytics for Digital Platforms", 2025.
- First Place in the ACM Student Research Competition (SRC) at SIGMETRICS (entrant: Y. Dai) for the paper "Incentive-Aware Dynamic Resource Allocation under Long-Term Cost Constraints," 2025.
- Best OM Paper Award from Operations Research for the paper "Learning Product Rankings Robust to Fake Users," 2025.
- Best 40-Under-40 MBA Professors, 2025.
- Distinguished Paper Award recognizing three of the best papers presented at the International Joint Conference on Artificial Intelligence (IJCAI) for the paper "Online Combinatorial Optimization with Group Fairness Constraints," 2024.
- MIT-IBM Watson AI Lab grant, ($170k), Sept. 2024 - Sept. 2025.
- The INFORMS Minority Issues Forum (MIF) award (winner) for the paper "Learning Product Rankings Robust to Fake Users," Jan. 2023.
- The Office of Naval Research (ONR) grant: "Fairness on Online Platforms," Award ID #N00014-23-1-2584, ($500k), Jan. 2023 - Dec. 2026.
- MIT-IBM Watson AI Lab grant, ($98k), Jan. 2022 - Dec. 2023.
- The INFORMS Social Media Analytics Best Student Paper Award (finalist) for the paper "Fair Assortment Planning," entrant: Qinyi Chen, 2022.
- The INFORMS IBM Best Student Paper Award Competition (finalist) for the paper "Fair Assortment Planning," entrant: Qinyi Chen, 2022.
- The INFORMS Data Mining Competition Award (General Track, finalist) for the paper "Learning Product Rankings Robust to Fake Users," 2022.
- The INFORMS Data Mining Competition Award (General Track, finalist) for the paper "Online Learning via Offline Greedy Algorithms: Applications in Market Design and Optimization," 2021.
- Keynote speaker at the AdKDD workshop, in conjunction with the ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2021.
- MIT Research Support Award ($75k), 2021.
- Young Investigator Award at the Office of Naval Research (ONR), "Finding a Needle in a Haystack: Utilizing Structures and Predictive Information in Online Optimization," Award ID #N00014-21-1-2776, ($510k), 2021-2024.
- Google Research Award ($30k), 2020.
- MIT-IBM Watson AI Lab grant, ($150k), 2020-2021.

- MIT Indonesia seed grant, ($25k), 2021.
- MIT-Liberty Mutual Insurance Collaboration (an MIT Quest for Intelligence AI research initiative) grant, "Data-driven Schemes for Enhancing Customers Experience in the Insurance Industry," ($325k), 2020-2022.
- The Service Science Best Paper Award (finalist) for the paper "Dynamic Pricing for Heterogeneous Time-Sensitive Customers," 2019.
- Google Faculty Research Award ($50k), 2018.
- Elwood S. Buffa Doctoral Dissertation Award from the Decision Sciences Institute, 2018.
- The INFORMS Data Mining Competition (finalist) for the paper "Boosted Second Price Auctions: Revenue Optimization for Heterogeneous Bidders," 2018.
- Dantzig Dissertation Award, 2017.
- Revenue Management and Pricing Dissertation Award, 2017.
- USC Ph.D. Achievement Award, USC, 2017.
- CAMS Prize for excellence in research with a substantial mathematical component, USC, 2017.
- The POMS (Production and Operations Management Society) college of SCM (Supply Chain Management) Best Student Paper Competition Award (finalist) for the paper "Real-time Optimization of Personalized Assortments," 2017.
- The INFORMS MSOM (Manufacturing and Service Operations Management) Student Paper Competition Award (finalist) for the paper "Real-time Optimization of Personalized Assortments," 2016.
- University Outstanding Teaching Award, USC, 2016.
- Marshall Ph.D. Teaching Award, USC, 2016.
- Provost Fellowship, USC, 2011-2013.

Journal Publications

1. Y. Deng, N. Golrezaei, P. Jaillet, J. Liang, V. Mirrokni, "Multi-channel Autobidding with Budget and ROI Constraints, **Management Science**, forthcoming.
2. F. Susan, N. Golrezaei, D. Kempe, and E. Emamjome-Zadeh, "Active Learning of Non-parametric Choice Models," **Operations Research**, forthcoming.
    - Honorable Mention, INFORMS Minority Issue Forum Student Poster Competition, entrant: Fransisca Susan, 2022.
3. N. Golrezaei and Evan Yao, "Upfront Commitment in Online Resource Allocation with Patient Customers," **Management Science**, forthcoming.
4. R. Galgana, N. Golrezaei, "Learning in Repeated Multi-Unit Pay-As-Bid Auctions," **Manufacturing & Service Operations Management**, vol. 27, issue 1, 2025.
5. B. Van Parys and N. Golrezaei, "Optimal Learning for Structured Bandits," **Management Science**, vol. 70, issue 6, pp. 3951–3998, 2024.
6. N. Golrezaei, V. Manshadi, J. Schneider, and S. Sekar, "Learning Product Rankings Robust to Fake Users," **Operations Research**, vol. 71, issue 4, pp. 1021-1439, 2023

- **The 2025 Best OM Paper Award from Operations Research.**
- **The 2023 INFORMS Minority Issues Forum (MIF) Competition (winner).**
- **The 2022 INFORMS Data Mining Competition (General Track, finalist).**

7. R. Niazadeh, N. Golrezaei, J. Wang, F. Susan, and A. Badanidiyuru, "Online Learning via Offline Greedy Algorithms: Applications in Market Design and Optimization," **Management Science**, vol. 69, issue 7, pp. 3759-4361, 2023.
   - **The 2021 INFORMS Data Mining Competition (General Track, finalist).**
8. M. Derakhshan, N. Golrezaei, V. Manshadi, and V. Mirrokni, "Product Ranking on Online Platforms," **Management Science**, vol. 68, issue 6, pp. 3975-4753, 2022.
   - Accepted for presentation at the MSOM Service SIG, 2018.
9. S. Balseiro, N. Golrezaei, M. Mahdian, V. Mirrokni, and J. Schneider, "Contextual Bandits with Cross-learning," **Mathematics of Operations Research**, vol. 48, pp. 1607-1629, issue 3, 2023.
10. M. Derakhshan, N. Golrezaei, and R. Paes Leme, "Linear Program based Approximation for Personalized Reserve Prices," **Management Science**, vol. 68, issue 3, pp. 1849-1864, 2022.
11. H. Beyhaghi, N. Golrezaei, R. Paes Leme, M. Pal, and B. Sivan, "Improved Approximations for Free-Order Prophets and Second-Price Auctions," **Operations Research**, vol. 69, issue 6, pp. 1805-1822, 2021.
12. N. Golrezaei, A. Javanmard, and V. Mirrokni, "Dynamic Incentive-Aware Learning: Robust Pricing in Contextual Auctions," **Operations Research**, vol. 69, issue 1, pp, 297 - 314, 2021.
13. N. Golrezaei, H. Nazerzadeh, and R. Randhawa, "Dynamic Pricing for Heterogeneous Time-Sensitive Customers," **Manufacturing & Service Operations Management**, vol. 22, issue 3, pp. 562-581, 2020.
    - **The 2019 Service Science Best Paper Award (finalist).**
14. N. Golrezaei and H. Nazerzadeh, "Auctions with Dynamic Costly Information Acquisition," **Operations Research**, vol. 65, issue 1, pp. 130 - 144, Aug. 2016.
15. N. Golrezaei, H. Nazerzadeh, and P. Rusmevichientong, "Real-time Optimization of Personalized Assortments," **Management Science**, vol. 60, issue 6, pp. 1532 - 1551, Feb., 2014.
    - **The 2016 MSOM Student Paper Competition (finalist)**.
    - **The 2017 POMS SCM College Best Student Paper Competition (finalist)**.
16. N. Golrezaei, A.G. Dimakis, and A.F. Molisch, "Scaling Behaviors of Wireless Device-to-Device Communications with Distributed Caching," IEEE Transactions on Information Theory, vol. 60, issue 7, pp. 4286 - 4298, July, 2014.

17. N. Golrezaei, P. Mansourifard, A.F. Molisch, and A.G. Dimakis, "Base-Station Assisted Device-to-Device Communications for High-Throughput Wireless Video Networks," IEEE Transactions on Wireless Communications, vol. 13, issue 7, pp. 3665 - 3676, July, 2014.
18. K. Shanmugam, N. Golrezaei, A.G. Dimakis, A.F. Molisch, and G. Caire, "FemtoCaching: Wireless Video Content Delivery through Distributed Caching Helpers," IEEE Transactions on Information Theory, vol. 59, issue 12, pp. 8402 - 8413, Dec., 2013.
19. N. Golrezaei, A.F. Molisch, A.G. Dimakis, and G. Caire, "FemtoCaching and Device-to-Device Collaboration: A New Architecture for Wireless Video Distribution," IEEE Communications Magazine, vol. 51, issue 4, pp. 142 - 149, Apr., 2013.

Working Papers

1. N. Golrezaei, P. Jaillet, and Zijie Zhou, "Online Resource Allocation with Convex-set Machine-Learned Advice ," Minor revision at **Operations Research**, Available at arXiv:2306.12282.
2. Q. Chen, N. Golrezaei, and F. Susan "Fair Assortment Planning," Minor revision at **Operations Research**, Available at SSRN 4072912 (2022).
    - **The INFORMS Social Media Analytics Best Student Paper (finalist), entrant: Qinyi Chen, 2022.**
    - **The INFORMS IBM Best Student Paper Award Competition (finalist), entrant: Qinyi Chen, 2022.**
    - Honorable Mention, INFORMS Minority Issue Forum Student Poster Competition, entrant: Qinyi Chen, 2022.
    - Accepted for presentation at the MSOM Service SIG, 2022.
    - Spotlight presentation at the annual INFORMS Revenue Management and Pricing (RM&P) Section Conference, 2022.
3. N. Golrezaei, P. Jaillet, and Zijie Zhou, "Online Resource Allocation with Samples," Major revision at **Operations Research**, Available at SSRN 4054796.
4. Q. Chen, N. Golrezaei, and D. Bouneffouf, "Non-Stationary Bandits with Auto-Regressive Temporal Dependency," Major revision at **Mathematics of Operations Research**, Available at arXiv:2210.16386.
5. N. Golrezaei and S. Sahoo, "Learning Safe Strategies for Value-Maximizing Buyers in Uniform Price Auctions," Major Revision at **Management Science**.
    - **The 2025 INFORMS RMP Jeff McGill Student Paper Award (First Place), entrant: S. Sahoo.**
    - **The 2025 INFORMS Michael H. Rothkopf Junior Researcher Paper Prize (Second Place), entrant: S. Sahoo.**

Selected Refereed Conference Papers

1. N. Golrezaei, M. Hajiaghayi, and S. Shin, "Optimal Contest beyond Convexity," Annual ACM Symposium on Theory of Computing (**STOC**), 2026
2. N. Golrezaei and S. Sahoo, "Learning to bid in discriminatory auctions with budget constraints," Conference on Artificial Intelligence and Statistics (**AISTATS**), 2026.
   - **Accepted for a Spotlight presentation.**
3. Y. Feng. N. Golrezaei, and Q. Li, "Nash equilibria in uniform price auctions: Theory, computation," ACM SIGMETRICS 2026
4. N. Golrezaei and S. Sahoo, "Learning Safe Strategies for Value-Maximizing Buyers in Uniform Price Auctions," International Conference on Machine Learning (**ICML**), 2025.
   - **The 2025 INFORMS RMP Jeff McGill Student Paper Award (First Place), entrant: S. Sahoo.**
   - **The 2025 INFORMS Michael H. Rothkopf Junior Researcher Paper Prize (Second Place), entrant: S. Sahoo.**
5. Y. Dai, N. Golrezaei, P. Jaillet, "Incentive-Aware Dynamic Resource Allocation under Long-Term Cost Constraints," The Proceedings of the Conference on Neural Information Processing Systems (NeurIPS), 2025.
   (a) **First Place in the 2025 ACM Student Research Competition (SRC) at SIGMETRICS, entrant: Y. Dai.**
6. Q. Chen, J. Liang, N. Golrezaei, D. Bouneffouf, "Interpolating Item and User Fairness in Recommendation Systems," The Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), 2024.
7. N. Golrezaei, R. Niazadeh, K. Patel, F. Susan, "Online Combinatorial Optimization with Group Fairness Constraints, International Joint Conferences on Artificial Intelligence (**IJCAI**), pp. 394-402, Aug. 3-9, 2024.
   - **The 2024 Distinguished Paper Award recognizing three of the best papers presented at IJCAI.**
8. Y. Deng, N. Golrezaei, P. Jaillet, J. Liang, V. Mirrokni, "Individual Welfare Guarantees in the Autobidding World with Machine-learned Advice," The ACM Web Conference (**WWW**), pp. 267-275, May 13-17, 2024.
9. S. Brânzei, M. Derakhshan, N. Golrezaei, Y. Han, "Learning and Collusion in Multi-unit Auctions," The Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), pp. 22191-22225, Dec. 10-16, 2023.
10. Q. Chen, N. Golrezaei, and D. Bouneffouf, "Non-Stationary Bandits with Auto-Regressive Temporal Dependency," ,The Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), pp. 7895-7929, Dec. 10-16, 2023.
11. Y. Deng, N. Golrezaei, P. Jaillet, J. Liang, V. Mirrokni, "Multi-channel Autobidding with Budget and ROI Constraints," International Conference on Machine Learning (**ICML**), pp. 7617-7644, Jul. 23-29, 2023.

12. N. Golrezaei, P. Jaillet, J. Liang, V. Mirrokni, "Pricing against a Budget and ROI Constrained Buyer," Conference on Artificial Intelligence and Statistics (**AISTATS**), pp. 9282-9307, Apr. 25-27, 2023.
13. N. Golrezaei, P. Jaillet, J. Liang, "Incentive-aware Contextual Pricing with Non-parametric Market Noise," Conference on Artificial Intelligence and Statistics (**AISTATS**), pp. 9331-9361, Apr. 25-27, 2023.
14. N. Golrezaei, V. Manshadi, J. Schneider, and S. Sekar, "Learning Product Rankings Robust to Fake Users," The Proceedings of the 22nd ACM Conference on Economics and Computation (**EC'21**), pp. 560-561, July 20-22, 2021.

    - **The 2025 best OM paper award from Operations Research.**
    - **The 2023 INFORMS Minority Issues Forum (MIF) Competition (winner).**
    - **The 2022 INFORMS Data Mining Competition (General Track, finalist).**

15. R. Niazadeh, N. Golrezaei, J. Wang, F. Susan, and A. Badanidiyuru, "'Online Learning via Offline Greedy Algorithms: Applications in Market Design and Optimization," The Proceedings of the 22nd ACM Conference on Economics and Computation (**EC'21**), pp. 737-738, July 20-22, 2021.

    - **The 2021 INFORMS Data Mining Competition (General Track, finalist).**

16. N. Golrezaei, M. Lin, V. Mirrokni, and H. Nazerzadeh, "Boosted Second Price Auctions: Revenue Optimization for Heterogeneous Bidders," The ACM Special Interest Group on Knowledge Discovery and Data Mining (**SIGKDD**) Conference, pp. 447-457, Aug. 23-27, 2021.

    - **The 2018 INFORMS Data Mining Best Theoretical Paper Competition (finalist).**

17. N. Golrezaei, I. Lobel, and R. Paes Leme, "Auction Design for ROI-Constrained Buyers," The ACM Web Conference (**WWW**), pp. 3941-3952, Apr.19-23, 2021.
18. N. Golrezaei, P. Jaillet, and J. Liang, "No-regret Learning in Price Competitions under Consumer Reference Effects," The Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), pp. 21416-21427, Dec. 6-12, 2020.
19. M. Derakhshan, N. Golrezaei, V. Manshadi, and V. Mirrokni, "Product Ranking on Online Platforms," The Proceedings of the 21st ACM Conference on Economics and Computation (**EC'20**), pp. 459-459, July 13-17, 2020.
20. M. Derakhshan, N. Golrezaei, and R. Paes Leme, "LP-based Approximation for Personalized Reserve Prices," The Proceedings of the 20th ACM Conference on Economics and Computation (**EC'19**), pp. 589-589, June 24-28, 2019.
21. S. Balseiro, N. Golrezaei, M. Mahdian, V. Mirrokni, and J. Schneider, "Contextual Bandits with Cross-learning," The Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), pp. 9676 - 9685, Dec. 8-14, 2019.
22. N. Golrezaei, A. Javanmard, and V. Mirrokni, "Dynamic Incentive-Aware Learning: Robust Pricing in Contextual Auctions," Advances in Neural Information Processing Systems (**NeurIPS**), pp. 9756 – 9766, Dec. 8-14, 2019.

23. N. Golrezaei, H. Nazerzadeh, and P. Rusmevichientong, "Real-time Optimization of Personalized Assortments," 14th ACM Conference on Electronic Commerce (**EC'13**), pp. 561 - 562, June 16-20, 2013.
24. N. Golrezaei, K. Shanmugam, A.G. Dimakis, A.F. Molisch, and G. Caire, "Femto-Caching: Wireless Video Content Delivery through Distributed Caching Helpers," International Conference on Computer Communications (**INFOCOM**), pp. 1107-1115, Mar. 25-30, 2012.

Teaching Experiences

- Instructor, 15.761, Introduction to Operations Management, Spring 2025.
- Instructor, 15.S07-SSIM, Real-time Analytics for Digital Platforms, MBA Course, MIT, Spring 2024 and 2025.
    - This course has been designed entirely by me, starting from scratch, with no prior versions existing.
- Instructor, 15.780, Stochastic Models in Business Analytics, Undergraduate Course, MIT, Fall 2019 and Fall 2020.
- Instructor, 15.774, The Analytics of Operations Management, MBA Course, MIT, Fall 2019 and Fall 2020.
- Instructor, 15.764, Theory of Operations Management, PhD Course, MIT, Spring 2019.
- Instructor, BUAD 311, Operations Management, Undergraduate Course, USC, Spring 2016.
    - **Recognized by the Marshall Ph.D. Teaching Award and the USC University Outstanding Teaching Award.**
- Teaching Assistant: Operations Management, USC, Spring 2015; Signals and Systems, Sharif University of Technology, 2009-2010; and Control Systems, Sharif University of Technology, 2007.

Talks

"**The Contest Behind the Feed: Optimal Contest for Recommender Systems**"

- Invited Guest Lecture, Stanford Graduate School of Business, PhD Course MGTECON 621: Topics in Economics and Computation, Jan. 2026.

"**Learning Safe Strategies for Value-Maximizing Buyers in Uniform Price Auctions**"

- Stanford RAIN (Research on Artificial Intelligence and INcentives) seminar, Feb. 2026.
- Paul Merage Business School, University of California, Irvine, Jan. 2026.
- Operations, Information & Technology seminar, Stanford Graduate School of Business, Nov. 2025.
- Chicago Booth Workshop on Online Platforms and Matching Markets, Aug. 2025.

- The INFORMS Workshop on Market Design at the EC Conference, New Haven, CT, Jul. 2024.

"**Stationary Bandits with Auto-Regressive Temporal Dependency**"

- IBM Research – Yorktown Heights, Nov. 2023.

"**Interpolating Item and User Fairness in Multi-Sided Recommendations**"

- MSOM Conference, Minneapolis, MN, June 2024.
- Columbia Workshop on Fairness in Operations an AI, Nov. 2023.
- University of Michigan, Ross School of Business, Technology and Operations group, Oct 2023.

"**Learning in Repeated Multi-Unit Pay-As-Bid Auctions**"

- MIT Sloan Reunion, May 2025.
- Hewlett Packard (HP) Labs, May 2025.
- Fulfillment by Amazon Science Group Seminar, May 2025.
- University of Illinois Urbana-Champaign (UIUC), Industrial and Enterprise Systems Engineering Grad Seminar, Jan. 2025.
- Kellogg Operations Seminar, Northwestern, Jan. 2025.
- INFORMS Annual Meeting, Oct. 2024.
- Haas School of Business, University of California Berkeley, OITM Seminar, Sept. 2024.
- MIT OR/STAT and OM Research Workshop, Sept. 2023.
- INFORMS Revenue Management and Pricing (RMP) Section Conference, Jul. 2023.

"**Online Resource Allocation with Convex-set Machine-Learned Advice**"

- Workshop on Learning-Augmented Algorithms, Toyota Technological Institute at Chicago (TTIC), Aug. 2024.
- INFORMS Revenue Management and Pricing (RMP) Section Conference, Jul. 2023.

"**Multi-channel Autobidding with Budget and ROI Constraints**"

- Simons Laufer Mathematical Sciences Institute, Dec. 2023.
- INFORMS Annual Meeting, Oct. 2023.
- INFORMS Revenue Management and Pricing (RMP) Section Conference, Jul. 2023.
- Tuck Business School, Dartmouth College, Apr. 2023.
- Meta Seminar Series (virtual seminar, CDS team), Apr. 2023.
- Harvard EconCS seminar, Mar. 2023.
- Regulating the digital economy conference, A collaborative event between the Digital Economy Project at Yale and Toulouse School of Economics, Feb. 2023.

"**Fair Assortment Planning**"

- Oracle Labs, May 2023.
- Meta Seminar Series (virtual seminar, CDS team), Mar. 2022.

"**Bidding and Pricing in Budget and ROI Constrained Markets**"

- Amazon Advertisement Science Seminar Series (virtual seminar), Feb. 2022.
- Keynote talk at AdKDD 2021 workshop: a leading workshop on artificial intelligence for computational advertising in conjunction with KDD (Knowledge Discovery and Data Mining) 2021, Aug. 2021.

" **No-regret Learning in Price Competitions under Consumer Reference Effects**"

- INFORMS Annual Meeting, Oct. 2021.

"**Personalizing the Size of Assortments Using a Field Experiment**"

- Liberty Mutual Insurance meeting, Mar. 2022.

"**Learning Product Rankings Robust to Fake Users**"

- INFORMS Annual Meeting, the Minority Issues Forum (MIF) Competition Session, Oct. 2023.
- INFORMS Annual Meeting, the Data Mining Competition Session, Oct. 2022.
- C3.AI Workshop on Data, Learning, and Markets, UIUC, Digital Transformation Institute, Oct. 2022.
- McDonough School of Business, Georgetown University, Apr. 2021.
- Wharton OM Seminar, University of Pennsylvania, Apr. 2021.
- Indian School of Business (ISB), Feb. 2021.
- Harvard Business School (HBS) Technology and Operations Management (TOM) Seminar, Dec. 2020.

"**Linear Program based Approximation for Personalized Reserve Prices**"

- INFORMS Annual Meeting, Nov. 2020.

"**Online Learning via Offline Greedy Algorithms: Applications in Market Design and Optimization**"

- National University of Singapore, Department of Analytics and Operations (DAO), Oct. 2024.
- Singapore Management University (SMU), Oct. 2024.
- MIT Sloan School of Management (Marketing Seminar), Apr. 2024.
- Google Workshop on Computing Innovation, Mar. 2024.
- Columbia Business School, Apr. 2023.
- Data-Driven Decision Processes Boot Camp workshop, Simons Institute for the Theory of Computing at the University of California, Berkeley, Aug. 2022.
- Learning and Games Seminar, Simons Institute for the Theory of Computing at the University of California, Berkeley, Mar. 2022.
- Virtual Prophets Institute, Dec. 2021.
- Information and Decision Sciences (IDS) seminar series at the University of Illinois Chicago, Nov. 2021.

- INFORMS Annual Meeting, Data Mining Competition Session, Anaheim, CA, Oct. 2021.
- Online seminar at the Decision Sciences Group, Fuqua School of Business, Duke University, Oct. 2021.
- STOR-i Centre, Lancaster University, Jan. 2021.
- Mathematics of Online Decision Making Workshop, Simons Institute for the Theory of Computing at the University of California, Berkeley, Oct. 2020.
- Marketplace Algorithms and Design (virtual) seminar, Aug. 2020.

"**Optimal Learning for Structured Bandits**"

- Structure of Constraints in Sequential Decision-making Workshop, Simons Institute for the Theory of Computing at the University of California, Berkeley, Oct. 2022.
- Virtual Prophets Institute, Dec. 2021.
- Seminar on Mathematics of Imaging Sciences, Data Sciences, and Optimization, Department of Mathematical Sciences, Rensselaer Polytechnic Institute, Oct. 2021.
- Workshop in Information and Learning in Decisions and Operations, July 2021.
- INFORMS Revenue Management and Pricing Conference, June 2021.
- UBC Sauder School OPLOG Division Online Seminar, Nov. 2020.
- Data Science Lab seminar series, Massachusetts Institute of Technology, Mar. 2020.

"**Incentive-aware Contextual Pricing with Non-parametric Market Noise**"

- The University of Chicago Booth School of Business, Chicago, IL, Feb. 2020.

"**Contextual Bandits with Cross-learning**"

- Workshop on Networks, Matching, and Platforms, Orlando, FL, Jan. 2020.

"**Auction Design for ROI-Constrained Buyers**"

- The ACM Web Conference, Apr. 2021.
- INFORMS Annual Meeting, Seattle, Oct. 2019.

"**Dynamic Incentive-Aware Learning: Robust Pricing in Contextual Auctions**"

- "Learning in Presence of Strategic Behavior" workshop at the twentieth ACM conference on Economics and Computation (ACM EC '19), Phoenix, AZ, June 2019.
- Revenue Management & Pricing Conference, Stanford University, Palo Alto, CA, June, 2019.
- Operation Technology and Information Management (OTIM) Symposium, SC Johnson College of Business, Cornell University, Ithaca, NY, May 2019.
- Harvard University, EconCS Group, Cambridge, MA, Apr. 2019.
- 5th Google Market Algorithms Workshop, Mountain View, CA, Feb. 2019.
- MIT Operations Research Center IAP Seminar, Cambridge, MA, Jan. 2019.
- IBM T. J. Watson Research Center, Yorktown Heights, NY, May 2018.

"**Boosted Second-price Auctions for Heterogeneous Bidders**"

- SIGKDD conference (Association for Computing Machinery's Special Interest Group on Knowledge Discovery and Data Mining), Aug. 2021.
- Carnegie Mellon University's Heinz College, Pittsburgh, PA, Apr. 2019.
- MIT Operations Research Center, Cambridge, MA, March 2019.
- 5th Google Market Algorithms Workshop, Mountain View, CA, Feb. 2019.
- MIT, David Simchi-Levi Seminar Series, Cambridge, MA, Feb. 2019
- INFORMS Annual Meeting, Data Mining Workshop, Phoenix, AZ, Nov. 2018.
- Google New York, New York May. 2018.
- The Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA, Nov. 2017.
- INFORMS Annual Meeting, Houston, TX, Oct. 2017.
- 3rd Workshop on Algorithmic Game Theory and Data Science, Cambridge, MA, June 2017.
- Marketplace Innovation Workshop, Palo Alto, CA, May 2017.
- POMS Annual Conference, Seattle, WA, May 2017.
- Google New York, New York, NY, Aug. 2016.

"**Product Ranking on Online Platforms**"

- ACM Conference on Economics and Computation, virtual conference, July 13-17, 2020.
- Rotman School of Management, University of Toronto, Nov. 2019.
- Amazon Research, Seattle, Oct. 2019.
- INFORMS Annual Meeting, Seattle, Oct. 2019.
- The Tuck Business School, Dartmouth College, Sept. 2019.
- POMS Annual Conference, Washington, DC, May 2019.
- IOMS Department, NYU Stern, New York, NY, Apr. 2018.
- Workshop on Networks, Matching, and Platforms, Salt Lake City, UT, Feb. 2018.

"**Real-time Optimization of Personalized Assortments**"

- Guest lecture for Stanford MS&E 319: Matching Theory, 2025.
- Decision Sciences Institute Annual Conference, Chicago, IL, Nov. 2018.
- Research Group at Staples Inc., Framingham, MA, Feb. 2017.
- The Technology and Operations Management Area at INSEAD, Fontainebleau, France, Feb. 2017.
- The Rady School of Management, University of California San Diego, San Diego, CA, Feb. 2017.
- The Yale School of Management, Yale University, New Haven, CT, Feb. 2017.
- The Graduate School of Business, Columbia University, New York, NY, Jan. 2017.
- The Ross School of Business, University of Michigan, Ann Arbor, MI, Jan. 2017.
- The Management Science and Operations Division, London Business School, London, UK, Jan. 2017.

- The Kenan-Flagler Business School, University of North Carolina at Chapel Hill, Chapel Hill, NC, Jan. 2017.
- The Kellogg School of Management, Northwestern University, Evanston, IL, Jan. 2017.
- The Naveen Jindal School of Management, University of Texas at Dallas, Richardson, TX, Dec. 2016.
- The Robert H. Smith School of Business, University of Maryland, College Park, MD, Dec. 2016.
- The Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA, Dec. 2016.
- INFORMS Annual Meeting, Nashville, TN, Nov. 2016.
- Southern California OM/OR Day, University of California, Irvine, Irvine, CA, May 2016.
- ACM Conference on Electronic Commerce (EC), Philadelphia, PA, June 2013.

"**Auctions with Dynamic Costly Information Acquisition**"

- INFORMS Annual Meeting, Philadelphia, PA, Nov. 2015.
- INFORMS Annual Meeting, San Francisco, CA, Nov. 2014.
- INFORMS Annual Meeting, Minneapolis, MN, Oct. 2013.

"**Optimal Dynamic Pricing for Customers with Heterogeneous Valuation Decay**"

- MSOM Conference, Chapel Hill, NC, June 2017.
- SoCal NEGT Symposium 2015, USC, Los Angeles, CA, Oct. 2015.
- POMS Annual Conference, Washington, DC, May 2015.

Ph.D. Theses Supervised

- Jason Cheuk Nam Liang (OR Center), 09/2018 - 2023 (co-advised with Patrick Jaillet)
- Fransisca Susan (OR Center), 09/2019 - 2023
- Qinyi Chen (OR Center), 09/2020 - 2025
- Rigel Galgana (OR Center), 09/2022 - present
- Sourav Sahoo (OR Center), 09/2023 - present
- Yan Dai (OR Center), 09/2024 - present (co-advised with Patrick Jaillet)
- Alireza Danaei, (OR Center), 09/2025 - present

Masters Theses Supervised

- Aaron Woldamanuel Wubshet, (MIT – LGO (Leaders for Global Operations)), (co-advised with Duane Boning), 2023-2025.
- Ololade O Olaleye, (MIT – LGO), (co-advised with Duane Boning), 2022-2024.
- Stanislav Slavov (ORC SM), 2020-2022.
- Felix Dumont (LGO), 2019-2021, (co-advised with Duane Boning)

- Bidusha Poudyal (LGO), (co-advised with Duane Boning), Winner of the 2020 best MIT's Leaders for Global Operations (LGO) thesis award, 2018-2020.

Capstone Projects Supervised

- Zeki Yan, and Vincent Tian, Title: "What Will Customers Buy? Recommendations with Price Range Forecasts," 2024.
- Joseph Lu, and Yen Hann Yoo, Title: "From Third Wheel to Center Stage: First Party Data Marketing," 2023.
- Elva He and Pan Asavamongkolkul, Title: "BMW Dynamic Pricing," 2021.
- Danial Ahmad Zafar Mirza and Rihab Rebai, Title: "Opioid Detection in US Mail Stream," 2020.
- Antoine Roncoroni and Alexandre Claude Marc Saillard, Title: "Suggesting order quantities for convenience stores," 2019.

Professional Activities and Service

- Co-organizer of the 2026 Conference on 'Market Design in the Age of AI,' Computational Market Design Center, Stanford University.
- Senior Program Committee (SPC) for the ACM Conference on Economics and Computation (EC 2026).
- Co-organizer of the 2025 Jeff McGill Student Paper Award for the INFORMS Revenue Management and Pricing (RMP) Section.
- Department Editor for Revenue Management and Marketplace Design at Naval Research Logistics (NRL), 2025- present.
- Moderator of the panel discussion: "Navigating the Future: GenAI's Impact on Online Advertising Markets" at the EC'25 Frontiers of Online Advertising Workshop, part of the ACM Conference on Economics and Computation (EC 2025).
- Co-organizer of the EC'25 Frontiers of Online Advertising Workshop, part of the ACM Conference on Economics and Computation (EC), 2025.
- Committee member for the search to fill a joint faculty position between Sloan and the College of Computing, with a focus on the social, economic, and ethical implications of computing and networks, 2024-2025.
- Co-chair of the INFORMS MSOM SIG-Day conferences, the Service SIG track, 2024.
- EIC (Editor-in-Chief) search committee member for the INFORMS journal on Data Science, 2024.
- Committee member for the Harold W. Kuhn Award, recognizing an outstanding paper published in NRL (Naval Research Logistics), 2024.
- Judge for the inaugural INFORMS Minority Issue Forum (MIF) Summer Webinar Competition, 2024.
- Track chair of the Economics, Online Markets, and Human Computation track at the the 2024 ACM Web Conference.
- Associate Editor of the Operations Research journal, 2023- present.
- Associate Editor of the Naval Research Logistic journal, 2023- 2025.

- Senior Editor of the Production and Operations Management journal, 2022-present.
- Associate Editor of Operations Research Letters journal, 2021-2025.
- Panelist for the 2022 NSF Operations Engineering (OE) Program, Unsolicited proposal panel.
- Cluster chair of the Revenue Management and Pricing (RMP) section of INFORMS 2021 Annual Meeting.
- Judge for the 2022 INFORMS RMP (Revenue Management and Pricing) Section Jeff McGill student paper award.
- Judge for the 2022 and 2023 MSOM student paper competition.
- Judge for the 2022 and 2023 INFORMS Data Mining best paper competition.
- Judge for the 2023 and 2021 MSOM Service SIG Conference.
- Panelist for Women in OR/MS (WORMS) on time management, procrastination, and strategies for working remotely, 2020.
- Referee for the following journals: Management Science, Operations Research, Mathematics of Operations Research, Manufacturing & Service Operations Management, Production and Operations Management, Stochastic Systems, INFORMS Journal on Optimization, and ACM Transactions on Economics and Computation (TEAC), Decision Sciences, Institute of Industrial and Systems Engineers (IISE), IEEE Transactions on Information Theory, IEEE Transactions on Wireless Communications, and IEEE Transactions on Vehicular Technology.
- Chair of the 2019 Elwood S. Buffa Doctoral Dissertation Award Committee.
- PC member of the 2019 INFORMS Revenue Management & Pricing Conference.
- PC member of the 2021 Neural Information Processing Systems (NeurIPS) conference.
- PC member of the 2019 and 2020 ACM Web Conference (formerly known as WWW).
- PC member of the ACM conferences on Economics and Computation, 2018-2022.
- Judge for the 2019 INFORMS O.R. & Analytic Student Team Competition.

Media Coverage

- Carbon Herald, "MIT Study: Pay-As-Bid Auction Model Could Boost Revenues In Carbon Markets, " Jan., 2025.
- MIT Sloan Office of Communications, "Unlocking Greater Value in Carbon Markets," Dec., 2024.
- GlobeNewswire, "MIT Sloan researchers develop first-of-their-kind algorithms," Sept., 2024.
- MIT Sloan Office of Communications, "MIT Sloan researchers develop first-of-their-kind algorithms to balance fairness of item display and user preferences in online marketplaces, Sept., 2024.
- Simons Institute for the Theory of Computing, "David Blackwell's Enduring Legacy," Nov., 2023.
- MIT ILP, "Data-Driven Markets," Mar. 2022.

- MIT Sloan Experts, "How to make online product rankings more trustworthy," Feb. 2021.
- Retail Brief Africa, "MIT Sloan professor's learning algorithms mitigate impact of fraud on product rankings," Dec. 2020.
- The Realtime Report, "MIT professor develops search model for product rankings on online platforms," April 2020.
- MIT Sloan Office of Media Relation, "Sloan prof. analyzes impact of product rankings on online platforms," Mar. 2020.
- MIT Sloan Office of Media Relations, "MIT Sloan professor designs model to limit price manipulation," Mar. 2020.
- Inside Big Data, "How to produce cleaner data for robust pricing," June, 2020.

Outside Activities

- Visiting Scholar, Operations, Information and Technology at Graduate School of Business, Stanford University, 07/2025-present.
- Visiting Researcher, Simons Institute for the Theory of Computing, UC Berkeley, Berkeley, CA, 01/2022-05/2022.
- Visiting Researcher, Facebook Research, Menlo Park, CA, 06/2021-06/2023.
- Visiting Researcher, Google Research, New York, NY, 10/2018-10/2020.

Citizenship

US Citizen