

Curriculum Vitae
2026-08-25

RESEARCH PROFILE	My research addresses a defining challenge of the AI economy: how to make data-driven systems more useful without compromising privacy, reliability, or public trust. I develop causal and machine-learning methods that reveal how algorithms influence what people see, what they choose, and what information they disclose. I then translate these insights into better designs for personalized advertising, digital media, and AI shopping agents. The broader goal of my work is to ensure that AI-driven platforms create measurable value for consumers while remaining accountable for their economic and social consequences.
EDUCATION	Cornell Tech & SC Johnson College of Business, Cornell University, USA, NY Aug 2023 – Present - Ph.D. Student in Quantitative Marketing (Focus: Machine Learning & Economics) GPA: 3.9/4 Research: <i>Machine Learning and Economic Theory for Personalization, Polarization, and Privacy (PPP)</i> Adviser: Omid Rafieian University of British Columbia (UBC), Canada, BC Jan 2022 – Aug 2023 - M.Sc. in Mathematics (Focus: Statistical Machine Learning) GPA: 4/4 (91.5/100) Thesis: <i>The Value of Text for Waiting Time Prediction Using Deep Learning: A Repair Shop Case Study</i> Advisers: Amir Ardestani-Jaafari, Javad Tavakoli Amirkabir University of Technology (AUT), Iran, Tehran Sep 2017 – Dec 2021 - B.Sc. in Industrial Engineering (Major Data Analytics) GPA: 18.16/20, Major GPA: 19.55/20 Thesis: <i>Fair Task Allocation Using Data Analytics in Service Firms (Received Distinctions)</i> Adviser: Amir Ahmadi-Javid
RESEARCH INTERESTS	Methods: Multi-Modal Machine Learning Models, Generative Models, Economic Theory, Causal Inference Applications: Non-standardized Data Analysis, Polarization, Personalization, Privacy, News Media
JOURNAL PUBLICATIONS	Ji, M., Mosaffa, M., Ardestani-Jaafari, A., Li, J., & Peng, C. (2024). Integration of text-mining and telemedicine appointment optimization. <i>Annals of Operations Research</i>, 341(1), 621–645. [Paper]
CONFERENCE PUBLICATIONS	Mosaffa, M. and Rafieian, O. (2026). The Privacy–Utility Trade-Off of Location Tracking in Ad Personalization. In <i>Proceedings of the 27th ACM Conference on Economics and Computation (EC '26)</i>. Extended abstract. [Paper] Full-length manuscript: Revise and Resubmit at <i>Management Science</i>. [Full Paper] Mosaffa, M., Rafieian, O., and Yoganarasimhan, H. (2025). Visual Polarization Measurement Using Counterfactual Image Generation. In <i>Proceedings of the 26th ACM Conference on Economics and Computation (EC '25)</i>. Extended abstract. [Paper]
WORKS IN PROGRESS	Mosaffa, M., Manzoor, E., Rafieian, O. “When Attention Falls but Talk Persists: Causal Attention Reward Alignment for Podcast Content”. Mosaffa, M., Ahmadnejadsaein, M., Rafieian, O., El Housni, O. “Revealed Preferences of AI Shopping Agents”.
PRESENTATION	- The Privacy-Utility Trade-Off of Location Tracking in Ad Personalization <i>Artificial Intelligence in Management (AIM)</i> USC, March 2026 - Visual Polarization Measurement Using Counterfactual Image Generation <i>Conference on AI, ML, and Business Analytics</i> Columbia University, December 2025 <i>ACM Conference on Economics and Computation (EC'25)</i> [Video] Stanford, July 2025 <i>INFORMS Marketing Science Conference (ISMS)</i> Washington, June 2025

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	▪ The value of text for waiting time prediction: A repair shop case study • <i>Canadian Operational Research Society (CORS)</i> Montreal, May 2023 • <i>Production and Operations Management Society (POMS) International</i> India, December 2022																												
HONORS & AWARDS	▪ Nagesh Gavirneni Outstanding Doctoral Student Award Cornell, 2026 ▪ Saroj and Vithala Rao Award for Excellence in Research and Academic Promise Cornell, 2025 ▪ Graduate Research Scholarship, 6,000 CAD UBC, 2022 & 2023 ▪ Third-best research award among more than 100 scholars POMS International Conference, 2022 ▪ Conference Travel Grant, 2,000 CAD The Fields Institute, 2022 ▪ The OR Diploma awarded by the Canadian Operational Research Society (CORS) CORS, 2022 ▪ Graduate Dean's Entrance Scholarship, 2,500 CAD UBC, 2022																												
PEER REVIEW & PROFESSIONAL SERVICE	▪ Program Committee Member, ACM Conference on Economics & Computation Apr 2026 – Present ▪ Canadian Operational Research Society (CORS) chapter president at UBC Nov 2022 – Aug 2023																												
SELECTED COURSES	Computer Science <table> <tr> <td>Deep Probabilistic & Generative Models (Cornell Tech)</td><td>Causal Inference with ML (Cornell Tech)</td></tr> <tr> <td>Human–Algorithm Interactions Seminar (Cornell)</td><td>NLP and Social Interaction (Cornell)</td></tr> <tr> <td>Computer Vision (Cornell)</td><td>Structure of Information Networks (Cornell)</td></tr> <tr> <td>ML in Marketing Seminar (Cornell)</td><td>Deep Learning (UBC)</td></tr> </table> Economics <table> <tr> <td>Econometrics I (Cornell)</td><td>Econometrics II (Cornell)</td></tr> <tr> <td>Microeconomic Theory I (Cornell)</td><td>Applied Game Theory (Cornell)</td></tr> <tr> <td>Structural Models Seminar (Cornell)</td><td>Choice Models Seminar (Cornell)</td></tr> <tr> <td>Dynamic Choice and Counterfactual Reasoning (UW Foster)</td><td>Microeconomics (AUT)</td></tr> <tr> <td>Macroeconomics (AUT)</td><td>Engineering Economics (AUT)</td></tr> </table> Probability, Statistics, and Operations Research <table> <tr> <td>Convex Optimization (UBC)</td><td>Stochastic Processes (UBC)</td></tr> <tr> <td>Queueing Theory (UBC)</td><td>Probability Theory (AUT)</td></tr> <tr> <td>Linear Algebra (AUT)</td><td>Statistics (AUT)</td></tr> <tr> <td>Data Analysis (AUT)</td><td>Linear Programming (AUT)</td></tr> <tr> <td>Mathematical Programming (AUT)</td><td>Simulation (AUT)</td></tr> </table>	Deep Probabilistic & Generative Models (Cornell Tech)	Causal Inference with ML (Cornell Tech)	Human–Algorithm Interactions Seminar (Cornell)	NLP and Social Interaction (Cornell)	Computer Vision (Cornell)	Structure of Information Networks (Cornell)	ML in Marketing Seminar (Cornell)	Deep Learning (UBC)	Econometrics I (Cornell)	Econometrics II (Cornell)	Microeconomic Theory I (Cornell)	Applied Game Theory (Cornell)	Structural Models Seminar (Cornell)	Choice Models Seminar (Cornell)	Dynamic Choice and Counterfactual Reasoning (UW Foster)	Microeconomics (AUT)	Macroeconomics (AUT)	Engineering Economics (AUT)	Convex Optimization (UBC)	Stochastic Processes (UBC)	Queueing Theory (UBC)	Probability Theory (AUT)	Linear Algebra (AUT)	Statistics (AUT)	Data Analysis (AUT)	Linear Programming (AUT)	Mathematical Programming (AUT)	Simulation (AUT)
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TEACHING EXPERIENCE	Cornell University, Teaching Assistant 2024–2025 ▪ Microeconomics for Management (NCCY5020) AI for Business Applications (NBA6921) Marketing Management (NCCT5030). University of British Columbia, Teaching Assistant and Lab Instructor 2022–2023 ▪ Advanced Predictive Modelling (DATA583) Web and Cloud Computing (DATA534) Computing Platforms for Data Science (DATA530) Resampling and Regularization Consumer (DATA571) Consumer Behaviour (MGMT442) Operations Management (MGMT355).																												
SKILLS	▪ Programming: Python, R, SQL Server, Matlab, GAMS, VBA ▪ Frameworks: SKlearn, SciPy, NLTK, PyTorch, TensorFlow, HuggingFace Transformers (Llama)																												
VOLUNTEERING ACTIVITIES	▪ Canadian Operational Research Society (CORS) chapter president at UBC Nov 2022 – Aug 2023 ▪ Consultant at ApplyChance for helping talented international students Aug 2021 – Aug 2023																												