Bahar D Viniche

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Summary

I am a PhD candidate in Transportation Engineering and Management at York University and a researcher in the Interactive-OR Lab. My research is centered around advancing data-driven decision-making in Supply Chain Management and Logistics. I work under the supervision of Mehdi Nourinejad at the Lassonde School of Engineering, York University and Opher Baron and Oded Berman at the Rotman School of Management, University of Toronto. I'm currently focusing on developing sustainable multi-echelon last-mile delivery solutions using novel delivery technologies.

Education

Phd in Transportation Engineering — Toronto, Canada
York University and Rotman School of Management, University of Toronto — *Jan 2021 – Current*
Thesis: Design of multi-echelon last-mile delivery systems. Supervisors: Dr. Mehdi Nourinejad, Dr. Opher Baron, Dr. Oded Berman
Courses: Intelligent Transportation System, Information Networks, Transportation Network Modelling
Teaching Assistantships: Capstone Design Project, Civil Engineering Project Management, Pavement Materials and Design

MSc in Air Transportation — Tehran, Iran
Sharif University of Technology — *Sep 2016 – Dec 2018*
Thesis: Airline Development Model based on Sub-Systems Dependencies. Graduated with Distinction. (Thesis Grade: Excellent)
Courses: Game Theory, System Dynamics, Optimal Design 1&2, Advanced Auto Control, Advanced Mathematics.
Teaching Assistantships: System Dynamics, CAD, Aircraft Performance.

B.S.c in Aerospace Enginering — Tehran, Iran
Sharif University of Technology — *Sep 2011 – Dec 2015*
Graduated with Distinction (Thesis Grade: Excellent)
Teaching Assistantships: Mechanics of Material.

Awards

Women in Transportation Graduate Student Award — Toronto, Canada
WTS (Women in Transportation)-Toronto Area Chapter — *2023*

Academic Excellent Award — Toronto, Canada
York University Faculty of Graduate Studies — *2023 & 2022*

Ranked 23rd among more than 5,000 participants — Tehran, Iran
Aerospace Engineering Graduate University Entrance Exam — *2016*

Ranked top 0.1% among more than 400,000 participants — Tehran, Iran
National University Entrance Exam — *2011*

Publications and Presentations

Journal Publications

Recipient-Dependent Last-Mile Delivery Routing With Autonomous Vehicle Applications.
Bahar D Viniche, Mehdi Nourinejad, Opher Baron, Oded Berman. *Reject and Resubmit (submitted) - Transportation Science*

Parametric Design of Time-Sensitive Routing With Recipient-Dependent Contributions.
Bahar D Viniche, Mehdi Nourinejad, Opher Baron, Oded Berman. *Ready for submission to Transportation Research: Part C*

Tactical Fleet Planning in Drone-Enabled Deliveries.
Bahar D Viniche, Mehdi Nourinejad, Opher Baron, Oded Berman. *Ready for Submission to Production and Operation Management (POM)*

Conference Presentations

Tactical Fleet Planning in Drone Enabled Deliveries and Predicting Drone Delivery Efficiency in Urban Areas using GNNs.
Purdue Operations Conference, 2024, West Lafayette, US

Autonomous Vehicle Applications in Recipient-Dependent Deliveries.
Canadian Operational Research Society (CORS), 2023, Montreal, Canada

Tactical Fleet Planning in Drone-Enabled Deliveries.
informs Annual Meeting, 2023, Pheonix, US

Fleet Composition Optimization in Drone Enabled Deliveries.
102nd Annual meeting of Transportation Research Board (TRB), 2023, Washington D.C., US

Fleet Composition Optimization in Drone Enabled Deliveries.
Canadian Operational Research Society (CORS), 2022, Vancouver, Canada

Airline Dynamic Modeling for Uniform Development Based on Sub-Systems Dependencies.
Third Annual Workshop on System Dynamics in Transportation Modelling, 2020, Palermo, Italy

Experience

Research and Development Engineer — Aug 2019 – Jul 2020
Sepehran Airline (FlySepehran) — *Tehran, Iran*
- Airline Cost Management Researcher.

Aviation Intern — Jun 2014 – Aug 2014
Isfahan International Airport — *Isfahan, Iran*
- Internship in Flight Control Tower.

Technical Skills

Programming Languages: Python (Pandas, Gurobi, etc.), Matlab, JavaScript, Wolfram Mathematica.

Soft Skill: Time Management, Engaging Presentation, Teamwork, Problem-solving, Documentation.

Service Records

Graduate Representative in *The Learning Curriculum and Students (LCS) Committee* — Sep 2023 – Jul 2024
Lassonde School of Engineering — *Toronto, Canada*

Session Chair — Oct 2023
2023 informs Annual Meeting — *Pheonix, US*

Moderator and Presenter in CLUE Symposium — Jan 2022 – Current
City Logistics and Urban Economics (CLUE) — *Toronto, Canada*

Session Chair — Jun 2023
2023 Canadian Operation Research Conference (CORS) — *Montreal, Canada*

Mentor in the Hack ITE York University — Feb 2022
ITE York University Student Chapter — *Toronto, Canada*

Graduate Representative in Equity, Diversity and Inclusion (EDI) Subcommittee — Sep 2021 – Jun 2022
York University — *Toronto, Canada*

SFC Graduate Research Assistance — Jan 2021 – Current
Smart Freight Center — *Toronto, Canada*

Central Council Member of Sharif University Mountaineering Group — Sep 2011 – Aug 2016
Sharif University of Technology — *Tehran, Iran*

Volunteer Tutor at Yarigaran Group to Providing Free Education to underserved students. — Sep 2011 – Aug 2013
Sharif University of Technology — *Tehran, Iran*

References available upon request.