

Amira Hijazi

CONTACT INFORMATION

AI Institute for Advances in Optimization
Georgia Institute of Technology
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Atlanta, GA 30308

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RESEARCH AREAS

Methods: Stochastic Optimization, Discrete Optimization, Deep Learning, Machine Learning
Applications: Healthcare Systems, Production Systems, Supply Chain

PROFESSIONAL EXPERIENCE

AI Institute for Advances in Optimization, Atlanta, Georgia Jul 2023 - Present
Postdoctoral Fellow

North Carolina State University, Raleigh, North Carolina Aug 2020 - Jun 2023
Research Assistant, ISE Department
Projects: Neural Networks and Column Generation for Parallel Machine Scheduling
Iterative Combinatorial Auctions Guided by Data Science

Teaching Assistant, ISE Department Aug 2019 - May 2020
Course: Quality Design and Control, Undergraduate Level

Research Assistant, ISE Department Aug 2018 - Jun 2019
Project: Risk-Averse Vaccine Allocation Using Stochastic Programming

Los Alamos National Laboratory, Los Alamos, New Mexico Jun 2020 - Sep 2020
Graduate Research Assistant Intern, Theoretical Division
Project: Correcting Misalignment in Drone-Mounted LiDAR Point Clouds

Freelancer.com May 2017 - May 2018
Freelance Industrial Engineer
Projects: Multiple projects for clients that involved Simulation, Optimization, and Data Analytics

Islamic University of Gaza, Gaza, Palestine Aug 2016 - Oct 2016
Teaching Assistant, Department of Industrial Engineering
Courses: Operations Research, Operations Management, Statistical Quality Control, Materials Engineering, Systems Simulation, Engineering Economy

European Gaza Hospital, Gaza, Palestine Jun 2015 - Aug 2015
Data Analytics Intern
Project: Analysis of overcrowding in outpatient clinics

EDUCATION

- North Carolina State University**, Raleigh, NC USA 2018 - 2023
Ph.D. in Industrial and Systems Engineering (ISE)
- Thesis: Resource Allocation Using Mathematical Programming and Machine Learning
- Advisors: Osman Ozaltin, Reha Uzsoy
- Islamic University of Gaza**, Gaza, Palestine 2012 - 2016
B.S. in Industrial Engineering
- Final Project: Proposed Scheduling Models Based on Real Life Instances

WORKING PAPERS

- [1] **Hijazi, A.**, Ozaltin, O., Jensen, M., Yarmand, H., Ivy, J. Risk-Averse Vaccine Allocation Using Stochastic Programming. (In Preparation)
- [2] Gopinath, S., Hijazi, H., Lemons, J., Collins, A., Schultz-Fellenz, E., Bent, R., **Hijazi, A.**, Riemersma, G.(2022). Globally Optimal Boresight Alignment of UAV-LiDAR Systems. arxiv.org/pdf/2202.13501
- [3] **Hijazi, A.**, Ozaltin, O., Uzsoy, R. Pointer-Transformer Based Column Generation for Parallel Machine Scheduling (In Preparation)

AWARDS & HONORS

- College of Engineering Travel Award for INFORMS Annual Meeting (\$500) Oct 2019
- College of Engineering Travel Award to attend "Understanding Health Behavior using Smartphones and Wearables Bootcamp" in Saskatoon, Canada Jun 2019
- Recipient of University Graduate Fellowship (\$4000) Aug 2018
- College of Engineering Travel Award for INFORMS Annual Meeting (\$500) Nov 2018
- Hani Qaddumi B.S. Scholarship, Hani Qaddumi Foundation Aug 2015 - May 2016
- Islamic University of Gaza Academic Excellence Scholarship Aug 2012 - May 2016

CONFERENCE PRESENTATIONS

- Amira Hijazi**, Osman Ozaltin, Reha Uzsoy. (2022). Neural Network and Column Generation for Parallel Machine Scheduling. INFORMS Annual Meeting.
- Amira Hijazi**, Osman Ozaltin, Maria Jensen, Hamed Yarmand, Julie Ivy. (2020). Risk-Averse Vaccine Allocation Using Stochastic Programming. INFORMS Annual Meeting.
- Amira Hijazi**, Osman Ozaltin, Maria Jensen, Hamed Yarmand, Julie Ivy. (2019). Mean-Risk Two-Stage Vaccine Allocation to Different Regions Under Uncertainty. INFORMS Annual Meeting.

SERVICE & LEADERSHIP

- INFORMS ORMS Tomorrow Student Magazine** Apr 2020 - Sep 2021
Co-Lead Editor
- ISE Department, NC State University** Oct 2020 - Aug 2021
Diversity, Equity and Inclusion Committee Graduate Students Rep
- EMPOWER Collaborative** Aug 2020 - Oct 2020
Student Ambassador for Call for Code Spot Challenge
- INFORMS Chapters/Fora Committee** Feb 2020 - Feb 2021

Student Chapter Representative INFORMS Health Applications Society	Feb 2020 - Dec 2020
Student Liaison NC State University Pursuing Operational Excellence Task Force	Dec 2019 - Jul 2020
Student Representative Graduate Student Association	Sep 2019 - May 2021
Department of Industrial & Systems Engineering Representative Graduate Student Association	Sep 2019 - May 2020
Research Recognition Committee Member INFORMS Annual Meeting	Oct 2019
Daily E-news Student Writer INFORMS Annual Meeting	Nov 2018
Student Volunteer Islamic University of Gaza IISE Student Chapter	Aug 2013 - May 2015
Founder and President Arab Innovation Network	Jun 2013 - Jun 2015
Student Ambassador	