

Dana Hassani

Isenberg School of Management
University of Massachusetts Amherst
Amherst, MA, 01003, USA
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EDUCATION

University of Massachusetts Amherst

Isenberg School of Management

Ph.D. Candidate in Operations Management (ABD)

Expected 2026

Dissertation Proposal: Essays on International Agricultural Trade Networks and Food Security in an Era of Disasters (Successfully defended on February 12, 2025)

Dissertation Committee Chair: Professor Anna Nagurney

Kharazmi University

Department of Operations and Information Management

MBA – Operations and Supply Chain Management

February 2019

Amirkabir University of Technology

Department of Biomedical Engineering

B.Sc. in Biomedical Engineering

January 2016

RESEARCH INTERESTS

Agri-Food Networks, Food Security, Supply Chains, Exchange Rates, Network Modeling

JOURNAL ARTICLES

- A Multiperiod, Multicommodity, Capacitated International Agricultural Trade Network Equilibrium Model with Applications to Ukraine in Wartime (with A. Nagurney, O. Nivievskiy, and P. Martyshev) (2025), *Transportation Science* 59(1), 143-164.
<https://doi.org/10.1287/trsc.2023.0294>
- Multicommodity international agricultural trade network equilibrium: Competition for limited production and transportation capacity under disaster scenarios with implications for food security (with A. Nagurney, O. Nivievskiy, and P. Martyshev) (2024), *European Journal of Operational Research* 314(3), 1127-1142.
<https://doi.org/10.1016/j.ejor.2023.11.010>
- Exchange rates and multicommodity international trade: Insights from spatial price equilibrium modeling with policy instruments via variational inequalities (with A. Nagurney, O. Nivievskiy, and P. Martyshev) (2023), *Journal of Global Optimization* 87, 1-30.
<https://doi.org/10.1007/s10898-023-01292-x>

BOOK CHAPTERS

- Quantification of International Trade Network Performance Under Disruptions to Supply, Transportation, and Demand Capacity, and Exchange Rates in Disasters (with A. Nagurney, O. Nivievskiy, and P. Martyshev) (2024), In: Kotsireas, I.S., Nagurney, A., Pardalos, P.M., Pickl, S.W., Vogiatzis, C. (eds) *Dynamics of Disasters*. Springer Optimization and Its Applications 217, 151-179. Springer, Cham.
https://doi.org/10.1007/978-3-031-74006-0_7

AWARDS & HONORS

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| <ul style="list-style-type: none"> • Second-time Recipient of the Isenberg Doctoral Program Outstanding Student Research Award
(Isenberg School of Management) | 2025 |
| <ul style="list-style-type: none"> • OIM Elevate Scholarship Award
(Department of Operations and Information Management, Isenberg School of Management) | 2025 |
| <ul style="list-style-type: none"> • Magna Cum Laude, INFORMS Student Chapter Award
(As President of UMass Amherst Student Chapter of INFORMS) | 2024 |
| <ul style="list-style-type: none"> • Second-time Recipient of the OIM Doctoral Student A Level Publication Award
(Department of Operations and Information Management, Isenberg School of Management) | 2024 |
| <ul style="list-style-type: none"> • Travel Grant for FutureBAProf Workshop
(University of Iowa) | 2024 |
| <ul style="list-style-type: none"> • Outstanding Service Award
(UMass Amherst Student Chapter of INFORMS) | 2024 |
| <ul style="list-style-type: none"> • Isenberg Doctoral Program Outstanding Student Research Award
(Isenberg School of Management) | 2024 |
| <ul style="list-style-type: none"> • OIM Exceptional Impact Scholarship Award
(Department of Operations and Information Management, Isenberg School of Management) | 2024 |
| <ul style="list-style-type: none"> • Accepted for the POMS Doctoral Consortium | 2024 |
| <ul style="list-style-type: none"> • Inaugural Recipient of the OIM Doctoral Student A Level Publication Award
(Department of Operations and Information Management, Isenberg School of Management) | 2024 |
| <ul style="list-style-type: none"> • Magna Cum Laude, INFORMS Student Chapter Award
(As Vice President of UMass Amherst Student Chapter of INFORMS) | 2023 |
| <ul style="list-style-type: none"> • Outstanding Doctoral Applicant Award
(Isenberg School of Management) | 2022 |

ACADEMIC EXPERIENCE

Graduate Research Assistant

Department of Operations and Information Management, Isenberg School of Management, UMass Amherst	January 2022 – Present
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Department of Operations and Information Management, Kharazmi University Thesis: Joint Pricing and Inventory Control of Competitive Retailers for Substitutable Products under Exchange Rate Risk	Fall 2018 - February 2019
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Doctoral Student Center Associate

The Virtual Center for Supernetworks, UMass Amherst	January 2022 – Present
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Instructor

OIM 240 – Business Data Analysis Department of Operations and Information Management, UMass Amherst	Spring 2024, Fall 2024, Spring 2025
<ul style="list-style-type: none"> • Teaching Evaluation: 4.5/5.0 (Spring 2024), 4.3/5.0 (Fall 2024), 4.8/5.0 (Spring 2025) 	

Teaching Assistant

OIM 413 – Logistics and Transportation
 Department of Operations and Information Management, UMass Amherst
 Instructor: Professor Anna Nagurney

Fall 2022

Operations Management

Department of Operations and Information Management, Kharazmi University
 Instructor: Professor Reza Yousefi Zenouz

Spring 2018

CONFERENCE PRESENTATIONS

- A Multiperiod Multicommodity Capacitated International Agricultural Trade Network Equilibrium Model with Applications to Ukraine in Wartime (with A. Nagurney, O. Nivievskyi, and P. Martyshev), **INFORMS Annual Meeting**, Seattle, Washington, October 20-23, 2024; **POMS Annual Conference**, Atlanta, Georgia, May 8-12, 2025; **DSI Annual Conference**, Orlando, Florida, November 22-24, 2025.
- Quantification of International Trade Network Performance Under Disruptions to Supply, Transportation, and Demand Capacity, and Exchange Rates in Disasters (with A. Nagurney, O. Nivievskyi, and P. Martyshev), **NEDSI Annual Conference**, Cambridge, Massachusetts, April 4-6, 2024; **POMS Annual Conference**, Minneapolis, Minnesota, April 25-29, 2024; **INFORMS Annual Meeting**, Atlanta, Georgia, October 26-29, 2025.
- International agricultural trade network equilibrium: competition for limited production and transportation capacity under disaster scenarios with implications for food security (with A. Nagurney, O. Nivievskyi, and P. Martyshev), **DSI Annual Conference**, Atlanta, Georgia, November 18-20, 2023; **INFORMS Security Conference**, Arlington, Virginia, July 28-30, 2024.
- Exchange rates and multicommodity international trade: insights from spatial price equilibrium modeling with policy instruments via variational inequalities (with A. Nagurney, O. Nivievskyi, and P. Martyshev), **Workshop: PanOptiC View on Global Optimization**, University of Florida, Gainesville, Florida, March 9-10, 2023; **INFORMS Annual Meeting**, Phoenix, Arizona, October 15-18, 2023.

PROFESSIONAL SERVICES / AFFILIATIONS

Member

UMass Amherst Student Chapter of INFORMS

January 2022 – Present

Vice President

UMass Amherst Student Chapter of INFORMS

September 2022 – August 2023

President

UMass Amherst Student Chapter of INFORMS

September 2023 – August 2024

Professional Memberships

Institute for Operations Research and the Management Sciences (INFORMS)

Since 2022

Manufacturing & Service Operations Management (MSOM) Society of INFORMS

Since 2022

Decision Sciences Institute (DSI)

Since 2023

Production & Operations Management Society (POMS)

Since 2024

REFERENCES

- Anna Nagurney, Ph.D. nagurney@isenberg.umass.edu
 Eugene M. Isenberg Chair in Integrative Studies
 Director, Virtual Center for Supernetworks
 Department of Operations and Information Management
 Isenberg School of Management, University of Massachusetts Amherst

- Senay Solak, Ph.D. solak@isenberg.umass.edu
John F. Smith Memorial Professor and Department Chair
Department of Operations and Information Management
Isenberg School of Management, University of Massachusetts Amherst
- Golbon Zakeri, Ph.D. gzakeri@umass.edu
Full Professor of Industrial Engineering
Department of Mechanical and Industrial Engineering
College of Engineering, University of Massachusetts Amherst
- Hari Balasubramanian, Ph.D. hbalasub@admin.umass.edu
Full Professor of Industrial Engineering
Department of Mechanical and Industrial Engineering
College of Engineering, University of Massachusetts Amherst