### Saeideh Mirghorbani

Charles E. Scheidt Faculty Fellow in Atrocity Prevention

Binghamton University
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Ac	ade	mic
Pos	itio	ns

Assistant Professor, Business Analytics and Operations Binghamton University (SUNY), Binghamton, NY

Fall 2018-Present

#### Education

Ph.D., Operations Management

2014-2018

The University of Alabama, Tuscaloosa, AL

Dissertation Title: Medical Decision Making in Patients with Chronic Diseases

Advisors: Dr. Sharif Melouk and Dr. John Mittenthal

M.S., Production Management

2009-2011

Allameh Tabatabae University, Tehran, Iran

B.S., in Industrial Management

2005-2009

Allameh Tabatabae University, Tehran, Iran

#### Research Interests

Applied operations research in healthcare systems, Markov decision processes, optimization, simulation, data mining, machine learning

#### Publications

- Mirghorbani, S., S. Melouk, and J. Mittenthal. 2021. The Effect of Adherence on Antihypertensive Therapy Plans in Patients with Type 2 Diabetes. *IISE Transactions on Healthcare System Engineering*, https://doi.org/10.1080/24725579.2021.1879321
  - This paper is selected to be featured in the ISE Magazine in 2021.
- Mirghorbani, S., S. Melouk, and J. Mittenthal. 2020. Impact of Patient Adherence on Treatment Cost. Target: *Omega*.
- Mirghorbani, S., S. Melouk, and J. Mittenthal. 2021. Using Partially Observable Markov Decision Processes to Improve Alzheimer's Disease Screening. To be submitted to *Manufacturing & Service Operations Management*.

# Conferences & Presentations

Mirghorbani, S., S. Melouk, and J. Mittenthal. Using Partially Observable Markov Decision Processes to Improve Alzheimer's Disease Screening.

- Center for Collective Dynamics of Complex Systems at Binghamton University, 2019, Binghamton, NY.
- INFORMS Annual Meeting 2019, Seattle, WA.
- POMS Annual Meeting 2019, Washington D.C.

Mirghorbani, S., S. Melouk, J. Mittenthal. The Effect of Adherence on the Anti-Hypertensive Therapy Plans in Patients with Diabetes.

- POMS Annual Meeting 2018, Houston, TX.
- DSI Annual Meeting 2017, Washington, D.C.
- INFORMS Annual Meeting 2017, Houston, TX.

Mirghorbani, S., S. Melouk, J. Mittenthal. Anti-hypertensive Therapy Plan for Patients with Diabetes.

• INFORMS Healthcare 2017 Conference. Rotterdam, Netherlands.

Mirghorbani, S., S. Melouk, J. Mittenthal. Optimal Statin Therapy Plan For Diabetic Patients.

• INFORMS Annual Meeting 2016, Nashville, TN.

# Honors & Awards

- Charles E. Scheidt Faculty Fellow in Atrocity Prevention, 2020 present.
- SUNY Binghamton Teaching Honor Roll, 2019 & 2020.
- International Travel Grant, June 2017, \$2300, The University of Alabama, Tuscaloosa, AL
- Summer Excellence in Research (SEiR) Grant, 2016, \$5000, Culverhouse College of Commerce & Business Administration, The University of Alabama, Tuscaloosa, AL
- Student Fellowship, Master's Degree Program, Production Management, 2009, Allameh Tabatabae University, Tehran, Iran
- Student Fellowship, Bachelor's Degree Program, Industrial Management, 2005, Allameh Tabatabae University, Tehran, Iran

#### Workshops

- NSF CAREER Workshop, Spring 2021, Binghamton University, Binghamton, NY.
- Proposal Writing Workshop, Fall 2020, Binghamton University, Binghamton, NY.
- Data-driven Approaches to the Humanities, Spring 2019, Binghamton University, Binghamton, NY.
- INFORMS Annual Meeting New Faculty Colloquium, Fall 2018, Phoenix, AZ.
- Conducted Python Workshop, Spring 2018, The University of Alabama, Tuscaloosa, AL
- Organized R Workshop, Fall 2017, The University of Alabama, Tuscaloosa, AL
- Conducted "IATEX" Workshop, Fall 2016, The University of Alabama, Tuscaloosa,
- INFORMS Annual Meeting Doctoral Students Colloquium. Fall 2016. Nashville, TN.

### Teaching Experience

#### Instructor

Binghamton University (SUNY), Binghamton, NY

Fall 2018 - Present

- SCM 560 Decision Modeling & Risk Analysis
- MGMT 507 Operations Management
- SCM 360 Spreadsheet Modeling & Decision Making
- SCM 375 Applied Models Operations Management

The University of Alabama, Tuscaloosa, AL

Fall 2016 & Summer 2017

• OM 300 - Introduction to Operations Management

# Service & Leadership

Mentor

• Women in OR/MS (WORMS) mentorship program

Fall 2019 - Present

Committee Member

• Undergraduate Curriculum Committee

Fall 2018 - Present

Session Chair

• INFORMS Annual Meeting

2017

INFORMS Student Chapter, The University of Alabama

• President

Summer 2017 - Spring 2018

- Won INFORMS Cum Laude award in 2018

• Secretary

Fall 2016

Iranian Student Association, The University of Alabama

Secretary

Fall 2016 - Fall 2017

Ad-hoc Referee

- International Journal of Environmental Research and Public Health
- International Journal of Production Economics
- Journal of the Operational Research Society

### Industry Experience

System Group, Tehran, Iran

System Analyst of Service Management Project

Jun 2011 - May 2014

• This position involved analyzing documents required for the implementation of the Infrastructure Technology Information Library (ITIL) standard. As part of this project, several tools were evaluated and ultimately Service Manager Console was selected as the main tool.

Coordinator of Service Management Project

Dec 2011 - Jan 2012

• As part of a customer satisfaction project, we used the SERVQUAL model as a measuring tool in order to evaluate the customer service quality. We discovered 10% increase in customer satisfaction proportion to last year.

### Professional Society Memberships

Institute for Operations Research and the Management Sciences (INFORMS)

- Health Applications Society
- Optimization Society
- Manufacturing and Service Operations Management Society
- Women in OR/MS Forum

Production and Operations Management Society (POMS) Decision Sciences Institute (DSI)

Skills

**Programming:** Python, R

Optimization: CPLEX, LINDO/LINGO

Packages: Numpy, Pandas, Scipy, SPSS, SAS Enterprise Miner

Others: Jupyter Notebook, RStudio, Solver, Microsoft Office, Palisade Risk Analysis

and Decision Making Tools, Arena, LATEX

# Personal Interest & Activities

• Oil Color & Pastel Painting, Pilates, Swimming