Meserret Karaca

401 Weil Hall, P.O. Box 116595 – University of Florida, Gainesville, FL 32611

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Academic Interests

Operations research; mathematical modelling; supply chain management; humanitarian relief logistics; O.R. applications in healthcare systems

Education

Doctor of Philosophy in Industrial Engineering
University of Florida, FL   *2018–present*
Advisors: Dr. Michelle Alvarado, Dr. Panos Pardalos

Master of Science in Operations Management
Manderson Graduate School of Business, The University of Alabama, AL   *2016–2018*
Advisor: Dr. Mesut Yavuz

Master of Science in Industrial Engineering
Graduate School of Engineering, Özyeğin University, İstanbul, Turkey   *2013–2016*
Advisors: Dr. Burcu Balçık, Dr. O. Örsan Özener

Scientific Preperation in Industrial Engineering
Faculty of Engineering, Özyeğin University, İstanbul, Turkey   *2012–2013*

Bachelor of Science in Mathematics
Faculty of Arts and Science, Fatih University, İstanbul, Turkey   *2006–2011*

Honors & Awards

Teaching and Research Assistantship at University of Florida, FL	*2018-present*
Teaching Assistantship at The University of Alabama, AL	*2016-2018*
Best Teaching Assistant Award at Özyeğin University, İstanbul,Turkey	*2016*
Teaching Assistantship at Özyeğin University, İstanbul,Turkey	*2013-2016*
TÜBİTAK (The Scientific & Technological Research Council of Turkey)	
2205 Undergraduate Scholarship Program	*2006–2011*
100% scholarship at undergraduate level at Fatih University, İstanbul,Turkey	*2006–2011*

Publications

Papers in Preparation
- Frequent Pattern Mining from Multivariate Time Series Data (joint work with Michelle Alvarado, Panos Pardalos, and Azra Bihorac)
- Minimizing Electricity Costs with Renewable Energy Generation and Battery Storage under Uncertainty (joint work with Mesut Yavuz)

Teaching Experiences

Teaching Assistant, University of Florida, FL   **2018-present**

Recitation Leader and Grader: Industrial Systems Simulation, Decision Support Systems

Teaching Assistant, The University of Alabama, AL   **2016-2018**

Recitation Leader and Grader: Computer Simulation, Introduction to Operations Management

Teaching Assistant, Özyeğin University, İstanbul, Turkey   **2012-2016**

Recitation Leader and Grader: Operations Research, Mathematical Programming, Logistics Management, Statistics

Invited Presentations

Frequent Pattern Mining from Multivariate Time Series Data,	
INFORMS Healthcare, MIT Sloan School of Management, Cambridge, MA	*July 2019*
Frequent Pattern Mining from Multivariate Time Series Data,	
IISE AnnualConference, The Rosen Shingle Creek, Orlando, FL	*May 2019*
Coordinated Inventory Planning for Humanitarian Relief Agencies,	
YAEM, Yaşar Univesity, İzmir, Turkey	*July 2016*

Conferences and Workshops Attended

Risk Management Approaches in Engineering Applications Workshop,	
University of Florida, FL	*October 2018*
Workshop on International Humanitarian NGOs and Emergency Aid,	
İstanbul Policy Center, İstanbul, Turkey	*February 2015*
MIT Zaragoza Logistics Center PhD Summer Academy, Zaragoza, Spain	*June-July 2013*
Healthcare Operations Workshops, Koç University, İstanbul, Turkey	*July 2012*

Graduate Course Works

University of Florida: Linear Programming; Fundamental Mathematical Programming; Stochastic Processes; Applied Probability and Statistics; Machine Learning; Advance Data Structures

The University of Alabama: Linear Programming; Supply Chain Modeling and Analysis; Inventory Management; Operations Scheduling Problems; Integer Programming; Production Management Models; Game Theory; System Simulation; Mathematical Statistics; Statistical Data Management; Applied Design of Experiments

Özyeğin University: Linear Programming; Supply Chain Management; Integer Programming; Stochastic Models; Production Operations Management; Game Theory; Advanced Simulation; Design and Operations of Transportation Networks

MIT Zaragoza Logistics Center PhD Summer Academy: Location Modelling; Dynamic Programming; Networks in Supply Chain Management; Tactical Planning Models

Computer Skills

Programming Languages: C, C++, Python, MATLAB

Data Analysis: SPSS, Microsoft Excel, SAS

Optimization: CPLEX   **Simulation**: ARENA

Languages

English (advanced), Greek (elementary), Turkish (native)

Teaching eligibility by proficiency exam of English Language School at The University of Alabama

Interests

Hobbies:: Running, video editing, reading (philosophy, psychology, theology), skateboarding, percussion

Volunteer Activities:: United Way Emerging Leaders United member