

EDUCATION

Kellogg School of Management, Northwestern University

Evanston, IL, USA

Ph.D. in Operations Management

2021 - 2026 (*expected*)

- Advisors: Achal Bassamboo and Ohad Perry
- Research Interests: Service operations, queueing theory, applied probability.

Department of Industrial Engineering, Bilkent University

Ankara, Turkey

M.Sc. in Industrial Engineering

2019 - 2021

- Advisor: M. Selim Aktürk
- Master's Thesis: *Airline Scheduling to Minimize Operational Costs and Variability*

B.Sc. in Industrial Engineering

2014 - 2020

JOURNAL

PUBLICATIONS

Deniz Şimşek, M. Selim Aktürk. Resilient Airline Scheduling while Minimizing Delay Risks. *Transportation Research Part C*, 2022. <https://doi.org/10.1016/j.trc.2022.103734>

WORKING

PAPERS

Deniz Şimşek, Chenguang (Allen) Wu, Achal Bassamboo, Ohad Perry. A Unified Fluid Model for Large Service Systems with Patience- or Delay-Dependent Service Times.

Deniz Şimşek, Achal Bassamboo, Ohad Perry. Design and Control of Large Service Systems with Delay-Dependent Service Times.

TALKS AND

CONFERENCES

Design and Control of Large Service Systems with Delay-Dependent Service Times

- (*Upcoming*) INFORMS Annual Meeting, Atlanta, USA October 2025
- INFORMS APS Conference, Atlanta, GA July 2025
- INFORMS MSOM Conference, London, UK June 2025
- Poster Presentation – Chicago Operations Workshop, USA June 2025

A Unified Fluid Model for Large Service Systems with Patience- or Delay-Dependent Service Times

- (*Upcoming*) Purdue SCOM Conference, West Lafayette, IN August 2025
- INFORMS APS Conference, Atlanta, GA July 2025
- 35th Annual POMS Conference, Atlanta, USA May 2025
- INFORMS Annual Meeting, Seattle, USA October 2024
- Poster Presentation – Chicago Operations Workshop, Chicago, USA June 2024
- INFORMS Annual Meeting, Phoenix, USA October 2023

Resilient Airline Scheduling while Minimizing Delay Risks

- INFORMS Annual Meeting, Indianapolis, USA October 2022
- YAEM (Turkish OR/IE Society) Annual Meeting, İstanbul, Turkey July 2021

TEACHING

Kellogg School of Management, Northwestern University

Evanston, IL, USA

Teaching Assistant in Operations Management

MBA Core Courses

- Operations Management Spring, Summer 2023

MBA Elective Courses

- Supply Chain Management Spring 2025
- Data Science with Large Language Models Fall 2024
- Applied Advanced Analytics Spring 2024
- Humanitarian and Non-Profit Operations Winter 2023, 2024
- Decision Models and Prescriptive Analytics Winter, Fall 2023

PhD Core Courses

- Stochastic Foundations II Spring 2024, 2025

Bilkent University

Ankara, Turkey

Graduate Teaching Assistant in Industrial Engineering

- Operations Scheduling, undergraduate elective Fall 2019, 2020
- Production Information Systems, undergraduate core Spring 2020

Undergraduate Teaching Assistant in Industrial Engineering

- Production Information Systems, undergraduate core Spring 2019
- Simulation, undergraduate core Fall 2018

Undergraduate Teaching Assistant in Computer Science

- Introduction to Programming, undergraduate core Spring, Fall 2017
- Introduction to Computing for Engineers, undergraduate core Fall 2016

HONORS AND AWARDS

- Fellowship of Kellogg School of Management for PhD Program 2021 - Present
- Finalist, INFORMS AAS Student Presentation Competition 2022
- National MSc/MA Scholarship, The Scientific and Technological Research Council of Turkey 2019 - 2021
- High Honor in Industrial Engineering, Bilkent University 2016 - 2021
- B.Sc. and M.Sc. Full Tuition Support and Scholarship, Bilkent University 2014 - 2021

INDUSTRY EXPERIENCE

IBM Turkey | Istanbul, Turkey

Summer 2018

- Operations intern in the Client Center department.
- Helped coding a robotic arm designed for a supply chain project of the company.

Cimsa | Eskisehir, Turkey

Summer 2017

- Production systems intern.
- Observed the manufacturing processes of different kinds of cement and examined the optimization techniques used for production planning.

SERVICE

INFORMS Pride Forum

Voting Board Member

April 2023 - Present

- Involved in establishing the Pride Forum to support LGBTQ+ members and allies within the INFORMS community.
- Served as an inaugural board member of the forum and participated actively in the mentorship subcommittee to promote inclusive mentorship initiatives.

Operations Student Life Committee, Kellogg School of Management

Vice President

Fall 2023 - Summer 2024

- Organized research seminars given by students and faculty of the Operations group at the Kellogg School of Management.
- Participated in the events co-organized with the NU INFORMS Student Chapter.

ADDITIONAL INFORMATION

Languages: Turkish (native), English (working proficiency).

Programming: R, C, MATLAB, Java, Python.