

# Deniz Şimşek

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## 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

- 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
- 35<sup>th</sup> 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.