

# Deniz Şimşek

## EDUCATION

### Kellogg School of Management, Northwestern University

Evanston, IL, USA

*Ph.D. in Operations Management*2021 - 2026 (*expected*)

- Advisor: Prof. Achal Bassamboo
- Research Interests: Service operations, queueing theory, applied probability.

### Department of Industrial Engineering, Bilkent University

Ankara, Turkey

*M.Sc. in Industrial Engineering*

2019 - 2021

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

*B.Sc. in Industrial Engineering*

2014 - 2029

## 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 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*) 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

	<b>Bilkent University</b> <i>Graduate Teaching Assistant in Industrial Engineering</i> <ul style="list-style-type: none"> <li>• Operations Scheduling, undergraduate elective</li> <li>• Production Information Systems, undergraduate core</li> </ul> <i>Undergraduate Teaching Assistant in Industrial Engineering</i> <ul style="list-style-type: none"> <li>• Production Information Systems, undergraduate core</li> <li>• Simulation, undergraduate core</li> </ul> <i>Undergraduate Teaching Assistant in Computer Science</i> <ul style="list-style-type: none"> <li>• Introduction to Programming, undergraduate core</li> <li>• Introduction to Computing for Engineers, undergraduate core</li> </ul>	Ankara, Turkey Fall 2019, 2020 Spring 2020 Spring 2019 Fall 2018 Spring, Fall 2017 Fall 2016
HONORS AND AWARDS	<ul style="list-style-type: none"> <li>• Fellowship of Kellogg School of Management for PhD Program</li> <li>• Finalist, INFORMS AAS Student Presentation Competition</li> <li>• National MSc/MA Scholarship, The Scientific and Technological Research Council of Turkey</li> <li>• High Honor in Industrial Engineering, Bilkent University</li> <li>• B.Sc. and M.Sc. Full Tuition Support and Scholarship, Bilkent University</li> </ul>	2021 - Present 2022 2019 - 2021 2016 - 2021 2014 - 2021
INDUSTRY EXPERIENCE	<b>IBM Turkey</b>   Istanbul, Turkey <ul style="list-style-type: none"> <li>• Operations intern in the Client Center department.</li> <li>• Helped coding a robotic arm designed for a supply chain project of the company.</li> </ul> <b>Cimsa</b>   Eskisehir, Turkey <ul style="list-style-type: none"> <li>• Production systems intern.</li> <li>• Observed the manufacturing processes of different kinds of cement and examined the optimization techniques used for production planning.</li> </ul>	Summer 2018 Summer 2017
SERVICE	<b>INFORMS Pride Forum</b> <i>Voting Board Member</i> <ul style="list-style-type: none"> <li>• Involved in establishing the Pride Forum to support LGBTQ+ members and allies within the INFORMS community.</li> <li>• Served as an inaugural board member of the forum and participated actively in the mentorship subcommittee to promote inclusive mentorship initiatives.</li> </ul> <b>Operations Student Life Committee, Kellogg School of Management</b> <i>Vice President</i> <ul style="list-style-type: none"> <li>• Organized research seminars given by students and faculty of the Operations group at the Kellogg School of Management.</li> <li>• Participated in the events co-organized with the NU INFORMS Student Chapter.</li> </ul>	April 2023 - Present Fall 2023 - Summer 2024
ADDITIONAL INFORMATION	<b>Languages:</b> Turkish (native), English (working proficiency). <b>Programming:</b> R, C, MATLAB, Java, Python.	