

# 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 (SMU)
- Research Interests: Service operations with customer behavior, queueing systems.

### 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

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

## SUBMITTED FOR PUBLICATION

2. “A Unified Fluid Model for Large Service Systems with Patience- or Delay-Dependent Service Times,” with Achal Bassamboo, Ohad Perry, and Chenguang (Allen) Wu. Under review at ***Operations Research***. <https://ssrn.com/abstract=5530258>

## WORK IN PROGRESS

3. “Design and Control of Large Service Systems with Delay-Dependent Service Times,” with Achal Bassamboo and Ohad Perry.
4. “Burning Daylight: Rational Abandonments under a Time Budget,” with Achal Bassamboo and Martin Lariviere.

## 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

- 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

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|------------------------|---|-------------------------|
| TEACHING<br>EXPERIENCE | <b>Kellogg School of Management, Northwestern University</b>  | Evanston, IL, USA       |
|                        | <i>Teaching Assistant in Operations Management</i>  |                         |
|                        | <i>MBA Core Courses</i>   |                         |
|                        | • Operations Management   | Spring, Summer 2023     |
|                        | <i>MBA Elective Courses</i>   |                         |
|                        | • 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       |
|                        | <i>PhD Core Courses</i>   |                         |
|                        | • Stochastic Foundations II   | Spring 2024, 2025       |
|                        | <b>Bilkent University</b>   | Ankara, Turkey          |
|                        | <i>Graduate Teaching Assistant in Industrial Engineering</i>  |                         |
|                        | • Operations Scheduling, undergraduate elective   | Fall 2019, 2020         |
|                        | • Production Information Systems, undergraduate core  | Spring 2020             |
|                        | <i>Undergraduate Teaching Assistant in Industrial Engineering</i>   |                         |
|                        | • Production Information Systems, undergraduate core  | Spring 2019             |
|                        | • Simulation, undergraduate core  | Fall 2018               |
|                        | <i>Undergraduate Teaching Assistant in Computer Science</i>   |                         |
| HONORS AND<br>AWARDS   | • Introduction to Programming, undergraduate core   | Spring, Fall 2017       |
|                        | • Introduction to Computing for Engineers, undergraduate core   | Fall 2016               |
|                        | • Fellowship of Kellogg School of Management for PhD Program  | 2021 - Present          |
|                        | • Finalist, INFORMS AAS Student Presentation Competition  | 2022                    |
|                        | • 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             |
|                        | <b>IBM Turkey</b>   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.   |                         |
| INDUSTRY<br>EXPERIENCE | <b>Cimsa</b>   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. |                         |
|                        | <b>INFORMS Pride Forum</b>  |                         |
|                        | <i>Voting Board Member</i>  | April 2023 - Present    |
|                        | • Served as an inaugural board member of the forum supporting LGBTQ+ members and allies within the INFORMS community.   |                         |
|                        | <b>Operations Student Life Committee, Kellogg School of Management</b>  |                         |
|                        | <i>Vice President</i>   | Fall 2023 - Summer 2024 |
|                        | • Organized research seminars given by students and faculty of the Operations group at the Kellogg School of Management.  |                         |
|                        | <b>Additional Information</b>   |                         |
|                        | <b>Languages:</b> Turkish (native), English (working proficiency).  |                         |
|                        | <b>Programming:</b> R, C, MATLAB, Java, Python.   |                         |