

# Fatemeh Zare Bidaki

Koç University, Istanbul, Turkey

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## Education

<b>Koç University</b> <i>Ph.D. in Business Administration (Operations Management and Information Systems)</i> Thesis: Online Optimization Approaches for Post-disaster Casualty Transportation under Uncertainty Advisors: Prof. Sibel Salman and Assoc Prof. Evrim Didem Gunes Research area: Humanitarian logistics, Mathematical modeling, Heuristics, Simulation, Emergency medical services. Selected courses: Integer & Combinatorial Optimization, Advanced Optimization, Heuristic Methods, Dynamic Programming, Machine Learning, Econometrics, Stochastic Models.	<b>Istanbul, Turkey</b> 2019–2025 (exp.)
<b>Sharif University of Technology</b> <i>MBA, Strategy &amp; Marketing</i>	<b>Tehran, Iran</b> 2012–2015
<b>Sharif University of Technology</b> <i>B.Sc. in Industrial Engineering</i> Thesis: <i>Optimizing the Surgery Master Schedule, Sequencing and Resource Allocation in Afshar Heart Hospital.</i>	<b>Tehran, Iran</b> 2008–2012

## Teaching Experience

<b>Faculty of Engineering, Koç University</b> <i>Instructor</i> <i>Engineering Economics (Indr202)</i> Responsible for lectures, course design, and assessment.	<b>Istanbul, Turkey</b> Fall 2025
<b>College of Administrative Sciences and Economics, Koç University</b> <i>Co-Instructor</i> <i>Quantitative Methods in Business (QMBU301, Section 3)</i> Responsible for lectures, course design, and assessment.	<b>Istanbul, Turkey</b> Spring 2025
<b>Koç University</b> <i>Teaching Assistant</i> Courses: Operations Management, Production and Service Operations, Introduction to Management Science (Lab), E-Commerce Management (Lab), Quantitative Methods in Business.	<b>Istanbul, Turkey</b> 2019–2024
<b>Yazd University</b> <i>Lecturer</i> Taught courses in Procurement, Warehousing, Distribution, E-commerce, International Marketing, and English for Management.	<b>Yazd, Iran</b> 2017–2019
<b>Sharif University of Technology</b> <i>Teaching Assistant</i> Courses: Project Management, Production Methods, Computer Skills in IE, Industrial Project Management.	<b>Tehran, Iran</b> 2011–2014

## Honors & Awards

<b>Graduate School of Business, Koç University</b> <i>Outstanding RA/TA Award</i> Recognized for exemplary research and teaching assistance, student support, and course development.	<b>Istanbul, Turkey</b> 2024–2025
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## Publications & Working Papers

“Adaptive Bayesian Estimation of Earthquake Casualties under Spatiotemporal Dynamics” – accepted for *IEEM Proceedings*.

“Online Optimization of Ambulance Dispatching in Mass Casualty Incidents with Bayesian Updates” – in preparation for *European Journal of Operational Research*.

“Hybrid Optimization and Simulation for Emergency Medical Services” – targeted for *Journal of Simulation*.

## Conference Presentations

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<b>EURO HOpe</b> <i>University of Edinburgh</i> <i>Disaster-Era Ambulance Routing with Partial or Unknown Victim Data.</i>	<b>Edinburgh, UK</b> 2025
<b>EURO 2025 Conference</b> <i>University of Leeds</i> <i>Bayesian Estimation and Online Optimization in Ambulance Dispatching .</i>	<b>Leeds, UK</b> 2025
<b>EWGLA</b> <i>University of Sheffield</i> <i>Dynamic location allocation and routing of rescue vehicles in Mass-Casualty Incidents.</i>	<b>Sheffield, UK</b> 2024
<b>POMS Conference</b> <i>Istanbul Technical University</i> <i>Dynamic Ambulance Dispatch with Bayesian Updates in Mass Casualty Incidents.</i>	<b>Istanbul, Turkey</b> 2024
<b>OR65</b> <i>University of Bath</i> <i>Simulation of Emergency Medical Services under Demand Uncertainty.</i>	<b>Bath, UK</b> 2023
<b>KU Healthcare Operations Workshop</b> <i>Koç University</i> <i>Fairness in Relief Logistics for Mass Casualty Incidents.</i>	<b>Istanbul, Turkey</b> 2023
<b>YA/EM Doctoral Colloquium</b> <i>Bogazici university</i> <i>Firefighting Mission Acceptance and Scheduling with Ant Colony Optimization.</i>	<b>Istanbul, Turkey</b> 2021

## Research Projects

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**2024–2025: System Dynamics Simulation of EMS in Mass-Casualty Incidents:** Built simulation with survival functions, Bayesian learning, and reinforcement learning integration.

**2021: CSR in Two-Level Supply Chains:** Game-theoretic study of investment coordination under power asymmetry.

## Professional Experience

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<b>Business Elites Group</b> <i>Managing Director of Operations</i> Led business consultations and delivered executive professional courses. Oversaw operations and strategic planning.	<b>Yazd, Iran</b> 2018–2019
<b>Parsis Holding</b> <i>Export and International Marketing Manager</i> Managed export and sales operations. Specialized in international marketing and negotiations with foreign ambassadors and chambers of commerce.	<b>Yazd, Iran</b> 2017–2018
<b>Sunan Malzemecilik</b> <i>International Marketing and Export Assistant</i> Developed marketing strategies for the Iranian market in the furniture industry, while managing key accounts for raw materials and accessories.	<b>Sakarya &amp; Istanbul, Turkey / Tehran, Iran</b> 2016–2018
<b>Bisaran Gasht Zhiwaar</b> <i>Business Development Manager</i> Directed inbound tourism division. Managed contracts, oversaw operations, and spearheaded expansion.	<b>Tehran, Iran</b> 2015–2016
<b>Golrang Holding, Padideh Paydar Co.</b> <i>Strategic Planning and Development Expert</i> Developed business plans, market research projects, and financial analyses.	<b>Tehran, Iran</b> 2014–2015

## Professional Memberships

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**2025–:** Member, IEEE.

**2024–:** Member, WISDOM / YoungWomen4OR Community.

**2023–:** Member, The Operational Research Society.

**2016–2019:** Member, Yazd Chamber of Commerce, Industries, Mines & Agriculture.

## Consultancy Positions

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Yazd Chamber of Commerce, Advisor, Yazd, Iran

Pishgaman Accelerator, Yazd Innovation Center, Yazd, Iran

Consultant of Industry Relations, Sharif University, Tehran, Iran

## Skills

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**Modeling:** Mathematical Optimization, Discrete time Simulation, System Dynamics, Machine Learning

**Programming:** Python (Pyomo, RL), R, LaTeX, Streamlit

**Software:** Vensim, Stella, SPSS, ATLAS.ti, Arena, RapidMiner, Primavera, MS Project.

**Languages:** English, Turkish, Persian