

Aikaterini Giannoutsou

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Education

University of Southern California, Los Angeles, CA **08/2019 – 06/2024 (Expected)**
Ph.D. Candidate in Operations Management, Marshall School of Business

New York University, New York, NY **08/2014 – 06/2018**
B.A. in Mathematics & Economics, College of Arts and Sciences & Courant Institute of Mathematical Sciences

Published Papers

A.Giannoutsou, D. Bertsimas et al. "Trauma Outcome Predictor (TOP): An Artificial-Intelligence (AI) Interactive Smartphone Tool to Predict Outcomes in Trauma Patients". *H.M. Journal of Trauma and Acute Care Surgery*. 2021.

Implemented data-driven mobile application for personalized predictions of outcomes in trauma patients.

A.Giannoutsou, D. Bertsimas et al. "Machine learning models for mitral valve replacement: A comparative analysis with the Society of Thoracic Surgeons risk score". *Journal of Cardiac Surgery*. 2021.

Working Papers

A. Giannoutsou, A.Daw. "Price-Waiting Trade-offs in Ridehailing Platforms". 2022.

A. Giannoutsou, G., Greys Sošić, K.Zheng. "Experimental Study of Stable Recycling Alliances". 2021.

Conferences

"Estimating Risk of Mortality and Morbidity in Elective Surgery Patients with Optimal Trees" *INFORMS* 2019.

Experience

MIT, Operations Research Center, Cambridge, MA **05/2018 – 06/2019**
Research Intern, Health Analytics Team

- Worked in developing a personalized prescriptive algorithm that provides recommendations to clinicians for treatment of patients.
- Analyzed data from Electronic Health Records and for the implementation of machine learning models to predict mortality and complications after surgery.
- Worked in the creation of a mobile application that makes personalized predictions based on the machine learning models developed.
- Co-authored two papers published in leading medical journals.

Programming and Data Science Skills

R, Julia, Python (experience in data cleaning and pre-processing, implementation of econometric & machine learning models, optimization, and simulations), *SQL* (experience in using SQL commands to analyze data and functions to manipulate strings, dates, & numeric data from different sources), *HTML, Microsoft Office*

Honors and Awards

Marshall School Fellowship **2019 – 2021**
University Honors Scholar, NYU Founders' Day Award **2018**