

Berke Derin Berkay

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Professional Profile

Emerging software engineer and data scientist with roots in industrial engineering and computer engineering. Analyzer. Data interpreter. Experienced in preparing and interpreting data from a management engineering perspective. Driven by the power of data to shape and transform society. (I have been referenced by Read Abdel-Sater from Accenture Montreal).

Education

Master of Information (MI) 2025 (*expected*)
Program: Human-Centred Data Science
Faculty of Information, University of Toronto
GPA: 3.93

Representative Courses: Data Analytics: Introduction, Methods and Practical Approaches, Introduction to Statistics for Data Science, Programming for Data Science

Bachelor of Science (BSc) 2023
Double Major: Computer Engineering, Industrial Engineering
Faculty of Engineering, Koc University, Istanbul, Turkey
Full-Ride State Scholarship (2019)
Vehbi Koc Scholar (2021)

Representative Courses: Database Management Systems, Modeling and Simulation, Data Structures and Algorithms

Selected Projects

Multicriteria Disaster Management Model 2023
Research Project (Koc University)

- Developed and tested a multiobjective resource allocation model for post-disaster scenarios in urban areas.

Segmentation of Truck Drivers Based on Performance 2022
Course Project (Indr491 - Industrial Engineering Design)

- Explored segmentation techniques of truck drivers based on performance metrics for Borusan Logistics Inc.
- Performed data cleaning, clustering with K-means, RFM, Gaussian mixture models, agglomerative clustering and PD cut.
- Applied various regression and neural network models.

Professional Experience

Researcher 2022 - 2023

Koc University, Istanbul, Turkey

- Researched disaster response management operations research models and explored methods to incorporate quantum integer programming.

Teaching Assistant

2020 - 2023

Koc University, Istanbul, Turkey

- Held lectures for the Introduction to Programming with Python Course.

Software Engineering Intern

2022

eKare Inc., Fairfax, United States

- Created an OpenCV C software for wound detection during surgical operations at US hospitals.
- Assisted with front-end and back-end development for the company website.

Data Science Intern

2022

Arcelik Inc., Istanbul, Turkey

- Contributed to data visualization and manipulation projects on Qlik.
- Designed and implemented a predictive model with feature engineering.
- Presented findings from the model, leading to a 20% customer churn decrease.

Software Engineering Intern

2022

Xtinge Inc., Istanbul, Turkey

- Assisted with the design of augmented reality-incorporated mobile games for both Android and IOS on Unity 3D.

Software Engineering Club Board Member

2021-2022

Koc University, Istanbul, Turkey

- Held weekly lectures on Django-React front-end and back-end development.

Software Engineering Intern

2021

InterTech Inc., Istanbul, Turkey

- Contributed to projects with Jira, Jenkins, and financial data and systems, such as trading platforms, risk management, and payment processing systems.

Additional Experience

Sailing Instructor

Summer 2019

Port Credit Yacht Club, Mississauga, Canada

Sailing Instructor

Summer 2018

Etobicoke Yacht Club, Toronto, Canada

Skills and Qualifications

Java

JS

C

C++

Assembly

React

Django

FastAPI

Scheme

Flutter

Unity

C#

Python

R

SQL

Qlik

Microsoft Office

LaTeX

Regression Analysis

Classification

Representation Learning

Clustering

Statistical Testing

Neural Network Algorithms

Turkish (native)

French (novice)

Competitive Sailing