

# Baran Deniz Korkmaz

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## Education

### Technical University of Munich

M.Sc. Computer Science - GPA: 1.5 (German grading system, equivalent to 3.5/4.0 US scale)

- Thesis: Time Series Foundation Models for Model-Based Reinforcement Learning.

Munich, Germany

April 2021 - December 2024

### Boğaziçi University

B.Sc. Computer Engineering - GPA: 3.22/4.0

- Thesis: Deepfake Detection
- Placement: Ranked 709th out of 2 million students in National University Exam.

Istanbul, Turkey

September 2016 - March 2021

## Work Experience

### Amazon Web Services

Software Development Engineer

- Developing cutting-edge software systems that serve millions of users worldwide.

Berlin, Germany

June 2025 - Present

### Netlight Consulting

IT Consultant

- Developed an internal feedback application using **Spring Boot** for the backend, **MySQL** for data storage, **RabbitMQ** for asynchronous messaging, and **ReactJS** for the frontend interface.

Munich, Germany

January 2025 - April 2025

### Siemens AG

Master Thesis Student

- Exploring the applications of time series foundation models on model-based reinforcement learning.

Munich, Germany

May 2024 - December 2024

### Infineon Technologies

Software Engineer - Working Student

- Developed a **RESTful** web service for ordering test machines using the **CQRS** pattern in **ASP.NET Core** with **MySQL**, streamlining request handling and data access.
- Built a containerized Proof-of-Concept (**PoC**) using **Ansible** for automated software deployment across multiple machines, replacing manual processes. Hosted the application server on **OpenShift**, using **Docker**, **Kubernetes**, and **Kustomize**.
- Developed **CI/CD** pipelines to automate the build, test, and deployment workflows for chip testing libraries using **Jenkins**.

Munich, Germany

May 2023 - May 2024

### Huawei Technologies

Software Engineer - Working Student

- Developed SPAD core emulation software in **Python** to estimate object detection probabilities for autonomous driving applications. Achieved a ~16x reduction in runtime by implementing parallel computation across multiple CPU cores using **OpenMPI**.
- Developed a data pruning technique for domain generalization in the task of person re-identification in **Python**.

Munich, Germany

September 2021 - April 2023

### Pointr

Software Engineer - Intern

- Maintained backend server written in **Flask API**. Implemented behavior-driven mobile test scenarios in **Java** using Appium, Gherkin, and Cucumber. Implemented an iOS mobile application using **Swift**.

Istanbul, Turkey

January 2020 - February 2020

## Projects

### Delivery System

- Developed a delivery system deployed on **AWS** for a semester project.
- Application services implemented by **Microservice** architecture pattern with **API Gateway** for load balancing. Backend microservices implemented using **Spring Boot** with **MongoDB**, and **ReactJS** on the client side.

Code

### Route Planner: Mandatory Internship at Forsailors

- Developed a web application to help sailors efficiently plan their routes using interactive maps.
- The application was built using **MERN** stack and features a custom map interface integrated with MapBox.

Website

### Bachelor's Projects: Repository containing all source code for undergraduate projects at Boğaziçi University.

Code

### Bachelor's Thesis: DeepFake Detection

- Developed an ML model that detects deepfake images in **Python** using **TensorFlow**.

Code

### CS Docs: A personal blog about data structures and algorithms.

Website

## Skills

**Programming Languages:** Java, Python, C++, C#, JavaScript/TypeScript, Kotlin, SQL, Solidity

**Backend & Frontend & DevOps:** Spring Boot, .NET, React, Docker, Kubernetes, Jenkins, Ansible, GitLab CI&CD

**Cloud & Database Systems:** AWS, Firebase, OpenShift, Vercel, MySQL, MongoDB

**Libraries & Developer Tools:** Git, Postman, PyTorch, TensorFlow, OpenMP, OpenMPI, Weights & Biases, LaTeX

**Languages:** Turkish (Native), English (Proficient), German (Beginner), French (Beginner)

**Algorithmic Skills:** Solved 100+ DSA problems on LeetCode. For my LeetCode profile, [click here](#).

## Extracurricular Activities

### Congress Member

Beşiktaş JK

Istanbul, Turkey

May 2023 - Present