

ALI BOLAT

hajorda@gmail.com | +90 505 030 1774 | Cankaya/Ankara | linkedin.com/in/alibolat
alibolat.xyz | github.com/hajorda

Education

Ted University Sept 2021 - Feb 2026 (Expected)
Bachelor's Degree, Computer Engineering

- GPA: 3.15 / 4.00

Ted University Sept 2024 - Feb 2026 (Expected)
Minor Degree, Communication Systems

- GPA: NA

Professional Experience

Ted University Ankara, Turkey
Team Lead at [TAVP](#) Oct 2024 - Present

- Implemented deep reinforcement learning algorithms (**DQN, DDQN, PPO**) for autonomous navigation of RC cars using MetaDrive and Carla simulators.
- Authored research paper "[Deep Reinforcement Learning for Autonomous RC Car Navigation in Dynamic Environments](#)" analyzing **DRL** algorithm performance
- Enhanced learning efficiency through reward shaping techniques for improved model adaptability in complex scenarios
- Collaborated across teams using **ROS2** for system integration, ensured project milestones were met, documentation, and troubleshooting

Monolib Ankara, Turkey
R&D Intern Jun 2024 - Oct 2024

- Created comprehensive technical documentation using **Mkdocs** for application features, input variables, and method functions
- Helped to implement a secure password management feature and encryption of the data in the database, allowing users to set encryption pins. I studied various encryption algorithms, including **symmetric** and **asymmetric encryption**, as well as **hash** algorithms. I built a benchmarking app to evaluate the performance of these algorithms in terms of encryption and decryption speed.
- Built trip management feature using **AWS Amplify**, including cloud database integration, form design, and backend logic
- Wrote integration and unit tests using **Flutter** testing libraries to ensure application reliability

Ted University Ankara, Turkey
Academic Tutor Jan 2022 - Dec 2023

- Provided technical guidance to 80+ students on laboratory assignments, improving academic performance and understanding

Personal Projects

Mobile App: iyiKahve [see on Action](#)

Ongoing

- İyiKahve is an app that allows users to find quality coffee and quality places, follow the beans and activities in coffee shops and discover new shops.
- The application is designed to help people find qualified coffee shops near them and to rate and share comments about the coffee shops they have visited before.
- Designed and implemented PostgreSQL database with custom authentication system
- Integrated Google Maps API for location-based coffee shop discovery
- Built with **Flutter**, **Riverpod**, **Firebase**, **Firestore**, and **Gcloud**

Mobile & Web App: KeduApp [see on Action](#), [see on Github](#)

Sept 2023

- Engineered web-based image processing platform with **AI-powered cat detection**, image compression, and format conversion using **React**.
- Developed **Go** backend implementing **RESTful API** architecture for **Google Cloud Storage** integration and **Cloudflare Turnstile** validation
- Implemented **perceptual hashing** algorithm to prevent duplicate uploads and store hash values in **Firebase Firestore**
- Designed **QR code** generation system for university gate access using **vulnerability** analysis techniques
- Built **real-time** chat functionality with **push notification** support for immediate user interaction
- Implemented high-performance image gallery with smooth animations.

Desktop App: SteamClone [see on Github](#)

Dec 2023

- A desktop app like Game store Steam that handles operation like buying games creating accounts and addFriend to other accounts etc.
- Designed Relation database on **SQLite**.
- Made database connection between the views and the server using **JDBC**.
- UI components built with **JavaFX** with several libraries.
- For dependency management **Maven** used and for Person object data stored as object in database with **Hibernate**.

Discord Bot: KauwelaBot [see on Github](#) , [see on Discord](#)

Nov 2022

- Developed multipurpose Discord management bot with AI capabilities using **GPT-3** and **DALL-E APIs**
- Implemented audio playback features for both YouTube and local music files using **JDAframework** and **Lavaplayer**
- Designed **RESTful API** integrations for enhanced functionality

Mobile App: GuvenliYuvam [see on Github](#)

Jan 2024

- Developed earthquake risk assessment application for Google Solution Challenge 2024
- Created scoring system to evaluate building safety with customized recommendations
- Implemented backend APIs using both **Flask** and **Spring** frameworks
- Built with **Flutter**, **Provider**, **Firebase**, **Google Maps API**, and **Gemini Pro API**

For additional projects and technical details, please visit my portfolio at alibolat.xyz

For a complete list of volunteer activities, involvements and certificates, please visit my LinkedIn profile at linkedin.com/in/alibolat