Eren Tasdemir

Summary

Software Engineer with more than 1 year of experience building consumer-facing Android apps using Kotlin and Java with Jetpack Compose and XML with a proven track record of delivering high quality results in cross-team environments. Strong in React, React Native, TypeScript for building full-stack applications and proficient in C, C++, C# (.NET) and Java for back-end applications, with experience in scalable containerisation and deployment. Trained with a Master's level qualification for AI applications, with also interests in cybersecurity.

Technical Stack

Languages: Kotlin, Java, C, C++, HTML/CSS, TypeScript, JavaScript, Python, C#, ARM64 Assembly, Haskell, SQL
Frameworks: Android, React, React Native (Expo), Jetpack Compose, .NET
AI/ML: PyTorch, Torch Vision, pandas, NumPy, SciPy, sklearn, RAG, AI Security (FL, ZKPs, FHE, DP)
Infrastructure: Git, Docker, Linux, Kubernetes, Firebase

Experience

AUGUST 2024 - SEPTEMBER 2025

Softtech Software Technologies Inc., Istanbul, Turkey - Software Engineer

- Worked in the Agile team which owned İşCep, the mobile banking application of the largest private bank in Turkey, with more than 10 million recurring users as an Android Developer.
- Owned several new features and maintained some existing ones, including critical parts. Also took part in the refinement of designs and business logic. Was responsible for the release of several new versions.
- Used Kotlin and Jetpack Compose for new features while maintaining existing Java and XML-based views, using Dagger as the dependency injection framework, while sticking to the MVVM architecture and following Test Driven Development principles. The app itself has a multi-module architecture utilising Retrofit, Coroutines and Flows.
- Took a lead role in the transition to Jetpack Compose with a focus on maintaining accessibility, mentoring other teammates by Pair Programming.
- Noticed and fixed a recurring bug in the app responsible for 16% of all crashes in the latest version.

JULY 2023 - AUGUST 2023

Softtech Software Technologies Inc., Istanbul, Turkey - Intern

- Worked on an Android application within the team responsible for Nays, an e-wallet application. Owned the entire application from requirements specification, UX design and testing. Used Kotlin and Jetpack Compose, and Koin for dependency injection. Used Firebase for backend services and JUnit for testing.
- Had a MVP ready to publish by the end of the 20-day internship, following the Clean Architecture principles and a MVVM architecture.

AUGUST 2022 - SEPTEMBER 2022

Intertech Information Technologies Inc., Istanbul, Turkey - Intern

- Built a Web3 blockchain application for parents to deposit cryptocurrency to their dependants' wallets using React for the front-end and Solidity for the smart contract on the Ethereum network. The application was rated the best among the entirety of the intern cohort.

Education

SEPTEMBER 2025 - SEPTEMBER 2026

The University of Manchester - MSc Advanced Computer Science

- GPA 80/100 (Distinction, TBC).
- Graduation Project: From Plug to Backend: Investigating the Attack Surface of the EV Charging Stack. Designed an automated penetration testing framework for the SLAC protocol based on detecting possible buffer and stack overflows/underflows, and illegal state transitions. Built bulk reporting features. Used Python for the framework, and various frameworks written in C, C++, Python and Java as test targets.
- Took part in other projects such as building a RAG-based LLM assistant from scratch with automated scoring against golden answers, using Python and PyTorch, and a 0→1 ML classifier using TorchVision. Focus was 50% AI/ML and 50% cybersecurity, including AI security and privacy.

AUGUST 2020 - JULY 2024

Istanbul Technical University, Turkey - BSc Computer Engineering

- GPA:3.49/4.00 (UK Equivalent 1st Class Hons). ABET accredited. 100% English teaching.
- Graduation Project: Investigation of Electro-Tactile Feedback Mechanisms for VR Glove. Designed and built hardware, programmed microcontroller firmware using C, built a C# driver for OpenVR integration of the device and a Unity 3D demo game to be used with the device.
- Built other projects with significant experience in React, React Native with Expo, Python and C++. The languages of teaching were C, C++, Python, Java and Haskell.
- Entry: Ranked 1549th among 3.3 million students in 2020 Turkey University Admittance Exams.

Volunteering

AUGUST 2023 - JULY 2024

EESTEC, Zurich, Switzerland (Remote) - Vice-Chairperson for Administrative Affairs

- Elected by votes of 42 committees with a cumulative total of more than 8000 members throughout Europe.
- Supervised 4 leaders all of which had several coordinators and members working under them.
- Was responsible for data management, IT infrastructure and GDPR compliance and the conduct of events of the whole association.

Publications

A Multidirectional Textile Interface for Remote Control Using Dynamic Area-Based Capacitance Modulation - Published February 2026 in Wiley Advanced Robotics Research (link).

- Contributed to the hardware design to convert analogue capacitance readings into digital signals communicated via BLE through firmware written in C++. Also wrote a Windows driver in C++ to make the device act like an Xbox Game Controller.

Personal Info

Languages: Turkish (Native), English (Fluent, IELTS 8.5 CEFR C2), German (Beginner), French (Beginner)