

Eren OĞUZ

Software Developer

erenoguz.developer@gmail.com
+90 532-797-96-01
<https://github.com/Trustedaid>
<https://linkedin.com/in/ernoguz/>
<https://www.erenoguz.dev>

SUMMARIZE

Electrical & Electronics Engineer (Istanbul Bilgi University, 2023) with a career starting in Unity game development and evolving into .NET back-end engineering. Proficient in C#, OOP, and microservices, with practical experience using RabbitMQ, Redis, and relational databases. Adept at designing scalable and secure distributed systems, following SOLID principles and Agile methodologies. Dedicated to advancing technical expertise while delivering value in enterprise-level projects.

PROFESSIONAL EXPERIENCE

UNILOGISTIX CO.

Software Engineer | “Cario Vehicle Tracking Device” Project Development

Istanbul, Türkiye

Apr 2023 – June 2024 (14 months)

- **IoT Integration & Real-Time Systems:** Integrated and managed MQTT protocol for real-time vehicle tracking, handling live location and telemetry data. Developed a multi-layered, scalable backend architecture that leverages multiple databases (PostgreSQL, MongoDB, Redis) and achieved over **70% performance improvement** with Redis caching.
- **Security & Authorization:** Designed and implemented a robust, role-based authorization system with hierarchical role levels (Admin, Company Manager, Fleet Manager, Driver) using JWT-based authentication. This significantly enhanced data access security across the platform.
- **System Monitoring & Quality Assurance:** Created a timer-based monitoring service that continuously checks vehicle device status and automatically corrects faulty data, such as incorrect GPS or ignition information. This proactive system increased overall reliability and data quality. MQTT for real-time messaging and device communication.
- **Development & DevOps:** Developed over **80 RESTful endpoints** using C#, and ASP.NET Core Web API. Streamlined DevOps processes by preparing multi-stage Docker files for efficient containerization and deployment.
- **Advanced Algorithm Development:** Developed sophisticated algorithms to calculate the distance between GPS coordinates using the Haversine formula, as well as custom logic for analyzing vehicle speed, idling, and stopping times.
- **System Observability & Documentation:** Implemented a comprehensive logging and monitoring system using Serilog to ensure system observability and faster debugging and prepared thorough technical documentation throughout the project's development lifecycle, including API guides and system architecture overviews.

- **Core Gameplay & Systems Implementation:** Designed and implemented essential game mechanics in Unity using C#, including player controls, physics-based interactions, AI behaviours, and item management systems such as player inventory and a trading system.
- **Collaborative Development & Prototyping:** Collaborated with team members to create and iterate on prototypes, contributing to level design, UI layout, and feature testing.
- **Debugging & Quality Assurance:** Utilized Unity's built-in debugging tools to efficiently locate and resolve runtime errors, ensuring stable and reliable builds for rigorous testing and deployment.
- **Version Control & Team Workflow:** Gained extensive experience in collaborative workflows using Git and similar version control systems, ensuring seamless team coordination, code merging, and project tracking.

CORE SKILLS

Languages & Frameworks: C#, .NET (Framework/Core), MVC, Entity Framework, Javascript, Typescript

Back-End & APIs: RESTful API Development, Microservices, Multitenancy

Front-End & Mobile: Angular, React, Vue.js, HTML5, CSS3, MAUI, React Native

Databases: PostgreSQL, MSSQL, MongoDB, Redis

Architecture & Patterns: OOP, SOLID, Onion Architecture, Design Patterns

Tools & Platforms: Git, Docker, Azure DevOps, Jenkins, GitHub Actions, Vite, Turbopack

Messaging & Security: RabbitMQ, SignalR, JWT, OAuth2, Identity Server

Cloud & CI/CD: Azure (Functions, Blob Storage), AWS (EC2, S3)

Collaboration Tools: Jira, Confluence, Slack

Version Control & Testing: Git, GitHub, BitBucket, Postman, Swagger

Other Skills: Asynchronous Programming, Multithreading, Agile (Scrum), Jira, Confluence

Team & Communication: Agile/Scrum, Team Collaboration, Problem-Solving, Time Management

EDUCATION

ISTANBUL BILGI UNIVERSITY

Bachelor's degree in Electrical & Electronics Engineering (English) – 2.57 / 4.00 GPA

“Unmanned Aerial and Ground Robot Collaboration in Search& Rescue Missions”, Senior Design Project, 2022.

Project Details: Developed a synchronized robotic system for search and rescue operations, using vSLAM for autonomous mapping, the A* algorithm for pathfinding, and R-CNN for object detection from a drone's camera. I utilized ROS to ensure seamless communication between the aerial and ground robots.

LANGUAGE PROFICIENCY

- Turkish: Native
- English: Advanced (IELTS English Certificate 7.0 – 2015) – Fluent in technical and professional