Ethem MERÇ

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EDUCATION

Fırat University   **Elazığ, Turkey**
Software Engineering (GPA : 3.51)   *2022 - 2026*

During my studies in Software Engineering, the focus was on AGILE methodologies, Object-Oriented Programming (OOP), data structures, and problem-solving approaches. Small-scale software projects were developed as part of the training.

PROJECTS

(.Net Core, C++, C, Python / Telecomunication) UAV Tower

Led a project as Scrum Master (AGILE) to track aircraft via SDR signals, automate post-landing parking operations, and visualize real-time weather data. The system was developed using OOP principles with .NET Core, C++, C, and Python, utilizing SQL and MongoDB for data storage, Redis for caching, and optimized data structures for processing aviation and meteorological data. The application was containerized using DOCKER to ensure consistent deployment across environments. The project was executed and delivered following Agile methodology.

(C++) Service Events Logging

This project is designed to develop a Windows service application that operates on Windows operating systems, using C and C++ for low-level control and performance. It provides functionalities for installing, uninstalling, and checking the status of a Windows service.

(C++) UDP Sender and Receiver / Telecomunication

This application is a system developed in C++ that enables data transmission using the UDP protocol. The sender and receiver operations are designed for fast, connectionless data transfer over Wi-Fi 802.11 networks operating at 2.4 GHz frequency.

(C++) Keyboard Re-layout

The program I developed in C/C++ remaps keyboard keys by modifying their Windows binary codes. This process involves manipulating the ASCII or scancode values corresponding to each key, using the Windows API to allow users to customize keyboard behavior as desired.

(C) Notebook Battery Manager (Ubuntu)

It is a Linux-based program developed in C that allows Ubuntu users on laptops to configure their device to charge the battery only up to a user-defined percentage, helping to extend battery life. The program operates via the terminal, providing a lightweight and scriptable interface.

(C) AES Encrytion and Decryption

A software developed in C that performs encryption operations to ensure data security using the AES-256 encryption and decryption methods.

(C) SHA-256 Search Duplicate

Creates a hash list using the SHA-256 algorithm in C and analyzes all files in a user-specified directory to identify duplicate files.

SKILLS

Programming Languages	Database Languages	Platforms
C++ – Intermediate	**MSSQL** – Intermediate	**Linux** – Pre-Intermediate
C – Intermediate	**PostgreSql** – Pre-Intermediate	**Git** – Pre-Intermediate
C# – Pre-Intermediate	**MongoDB** – Post-Beginner	**Docker** – Pre-Intermediate

LANGUAGES

Turkish	English	German
Writing – Native - C2	**Writing** – Advanced - C1	**Writing** – Beginner - A1
Reading – Native - C2	**Reading** – Advanced - C1	**Reading** – Beginner - A1
Speaking – Native - C2	**Speaking** – Upper-Interm. - B2	**Speaking** – Beginner - A1