Ege Bilecen

Fullstack Developer & Mechatronics Engineer

Dublin, Ireland
+353 85 189 4421
egebilecen@hotmail.com | LinkedIn | Portfolio | GitHub

I specialize in software development as a mechatronics engineer. I have done a variety of work in various fields, such as desktop programming, embedded programming, web development, and mobile development, using various programming languages. Because of this, I am quite quick to adapt to new projects and new programming languages.

EDUCATION

MEng in Electronic and Computer Engineering (IoT Major)   **2023 – 2024**
Master's Degree, Dublin City University   Dublin, Ireland

Grade: 1st Class Honours
Master's Project: Rust in the Linux Kernel

Modules:
- ➢ Data Analysis and Machine Learning
- ➢ Real-Time Digital Signal Processing
- ➢ Wireless/Mobile Communications
- ➢ OOP with Embedded Systems
- ➢ Connected Embedded Systems
- ➢ Network Stack Implementation
- ➢ Security for IoT and Edge Networks
- ➢ Web Application Development

Mechatronics Engineering   **2017 – 2022**
Bachelor's Degree, Erciyes University   Kayseri, Turkey

GPA: 3.13 / 4.00

SKILLS

- C
- C++
- C#
- Java
- Python
- Rust
- Lua
- PHP
- Javascript
- HTML / CSS
- PLC Programming

KNOWLEDGE

- Embedded Programming
- Socket Programming
- Image Processing
- Cryptography
- Linux
- Linux Kernel Dev.
- MySQL
- NodeJS
- ReactJS
- Xamarin
- Tauri
- ROS
- Selenium
- Spring Framework
- Chrome Extension Dev.
- Webview Apps
- Windows Forms Apps
- Dear ImGui
- Qt
- Git

PROFESSIONAL EXPERIENCE

bionluk   **Oct 2018 – Oct 2022**
Freelance Software Developer   Turkey

- Software development in C++, C#, Python, PHP, and Javascript based on customer requests.
- Desktop GUI application development in Qt and Windows Forms.
- Website development using HTML/CSS, Javascript and PHP.
- Completed more than **70** commissions.

LANGUAGES

- **Turkish:** Native
- **English:** Professional Proficiency

PROJECTS & INDIVIDUAL WORK

Linux Kernel Development
- Misc. character device implementation in C and Rust.
- Kernel customization and compilation.

Home Automation with Mesh Network
- System design of the mesh network.
- Design of the communication infrastructure between nodes, server, and user.
- User application UI design and software development using Xamarin.
- Embedded programming of microchips to communicate with sensors in C++.

Unmanned Aerial Vehicle (Drone)   Mar 2021 – Sep 2021
Turkey

- Electrical system design of the UAV.
- Calculations to select appropriate parts of the UAV, such as batteries, propellers, and motors, based on requirements.

I worked on this project when I attended the TUBITAK International Unmanned Aerial Vehicle Competition 2021.

Unmanned Aerial Vehicle (Drone) & Model Satellite   Nov 2019 – Sep 2020
Turkey

- Wrapping the MAVLink protocol implementation in Python.
- Autonomous movement implementation of the UAV using the MAVLink protocol in Python.
- I2C and SPI sensor implementations in Python.

I worked on this project when I attended the TUBITAK International Unmanned Aerial Vehicle Competition 2020 and the TUBITAK Model Satellite Competition 2020.

Unmanned Ground Vehicle   Feb 2019 – May 2020
Turkey

- Telemetry implementation of the UGV in C#.
- Camera data transmission implementation of the UGV in C#.
- Image processing for tracking via detecting entities such as humans, objects, etc. in Python.

My projects and work are **not** limited to these. More can be found in my [portfolio](#) and on [GitHub](#).

REFERENCES

Burak Gorbil
- Program Manager at **Twitter**.
- +353 86 311 3004
- burakgorbil@gmail.com