

# ALTUĞ BAKAN

Software Engineer

✉ [mail@alt.ug](mailto:mail@alt.ug)  [linkedin.com/in/altugbakan](https://www.linkedin.com/in/altugbakan)  [github.com/altugbakan](https://github.com/altugbakan)

## Experience

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### WEB Eindhoven

Eindhoven, Netherlands

*Software Engineer*

*June 2023 - Present*

- Developed Angular components with Angular Material for the frontend
- Engineered the C# backend with ASP.NET and Entity Framework
- Containerized services including database, backend, and frontend for seamless deployment
- Spearheaded the initial application deployment on an EC2 instance

### ASELSAN

Ankara, Türkiye

*Embedded Software Engineer*

*August 2022 - June 2023*

- Developed embedded firmware using Green Hills Integrity RTOS for various avionics hardware
- Developed Linux drivers and system software for custom Linux boards for military communication

*Application Software Engineer*

*August 2020 - August 2022*

- Developed various desktop applications using .NET and QtCreator for hardware interfacing and automated testing purposes
- Created a C# library which consists of reusable components to accelerate the GUI development within the team
- Developed embedded software on Arduino for digitally testing devices

*Candidate Software Engineer*

*December 2019 - August 2020*

- Developed a desktop application for testing and calibrating the laser diodes of a laser-guided system using serial communication

## Education

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### Istanbul Technical University

İstanbul, Türkiye

*Master of Science in Electronics Engineering, 3.56 / 4.00 GPA*

*2020 - 2023*

- **Thesis Title:** "Infrared and Visible Image Fusion by Unrolling Alternating Direction Method of Multipliers"
- **Study Topics:** Image Processing, Computer Vision, Deep Learning

### Middle East Technical University

Ankara, Türkiye

*Bachelor of Science in Electrical and Electronics Engineering, 3.12 / 4.00 GPA*

*2016 - 2020*

- **Capstone Project:** Light Fidelity (Li-Fi) Communication Robot
- **Study Topics:** Data Structures, Networking, Operating Systems, Microprocessors, Computer Architecture

## Personal Projects

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### Rust TFTP Server - [Link](#)

March 2023

- Developed a Trivial File Transfer Protocol (TFTP) server in pure Rust language
- Added support for TFTP option extensions
- Added multithreading to support multiple clients at the same time

### Oplà Spotify Controller - [Link](#)

October 2022

- Created a Spotify controller using the Spotify API and an Arduino Oplà
- Won the 3<sup>rd</sup> place award on Arduino Cloud Games

## Technical Skills

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**Languages:** C, C++, C#, Rust, JavaScript, TypeScript, Python

**Developer Tools:** Jira, Confluence, GitHub, Visual Studio, VSCode

**Technologies/Frameworks:** Linux, Git, .NET, ASP.NET, Angular, React, Svelte, Docker, MongoDB, MySQL, AWS