



Umut Yiğit

Ankara, Turkey
(+90) 507 896 5681
umutyigittr@gmail.com
linkedin.com/in/umyigit
github.com/umyigit

Experience

- Embedded Software Engineer, Intern** **ROKETSAN A.Ş.** **Jul 2025 - Aug 2025 (25 days)**
Avionics Software Development and Digital Hardware Design
 - Developed and tested embedded communication interfaces on STM32F413 and STM32F407G-DISC1 boards via STM32Cube, implementing UART and SPI protocols for data transmission.
 - Reviewed and applied manufacturer documentation to ensure correct protocol setup and hardware integration.
 - Integrated and evaluated the IMX5 Rug3 sensor, performing functionality verification and analyzing performance metrics.
- Undergraduate Research Scholar** **KOU Bilgisayar Ağları ve Haberleşme Laboratuvarı** **Oct 2024 - Jul 2025 (10 months)**
Backend, Server Side and Web Page Development
 - Contributed to AIDCARE, an AI-based mobile app for tracking diabetes, as part of TÜSEB 33987 project.
 - Developed a full-stack web application using Vue.js, with a Node.js proxy server and Redis caching layer.
 - PostgreSQL and Redis services were deployed via Docker and accessed from the application environment.
- Software Developer, Intern** **ASELSAN A.Ş.** **Jul 2024 - Aug 2024 (25 days)**
Radar and Electronic Warfare Systems, Test Team
 - Developed an "Antenna Test Results Analysis" tool to assist technicians in evaluating radar data.
 - Processed large text files (~20,000 lines) using regex, extracted key data, and exported structured reports in Excel.
 - Gained practical experience in radar and antenna systems, with emphasis on data processing and team collaboration.
- Part Time Staff** **KOU Gömülü Sistemler Laboratuvarı** **Feb 2024 - May 2024 (4 months)**
Artificial Intelligence
 - Gained knowledge in CNN and LSTM, and applied Python in AI-related tasks.

Education

Kocaeli University, Computer Engineering • Kocaeli, Turkey **2020 - 2025**
GPA: 3.46 / 4.00

Languages

- Turkish
- German
- English

Soft Skills

- Critical thinking, Creativity
- Problem solving, Willingness to learn
- Positive attitude, Teamwork

Programming Languages and Technologies

- C, Embedded Software (STM32, STM32Cube, UART, SPI)
- PostgreSQL, Vue.js, Git
- Docker, Python, C#

Projects

- Article Suggestion Web App — Developed a Python Flask web application integrating web crawling and NLP; implemented TF-IDF and cosine similarity algorithms to recommend content based on user input.
- 2D Restaurant Simulation — Developed a Python-based simulation to explore multithreading techniques; implemented Semaphore, Barrier, and thread synchronization logic for real-time interaction.
- Microcontroller-Based Space Game — Developed a space-themed game using Arduino and SSD1306 OLED display; implemented both game logic and graphics on a microcontroller platform.
- Family Tree Visualization Tool — Created a Java Swing application to parse CSV files and generate an interactive family tree; implemented hierarchical data visualization algorithms.
- File Navigator & Editor — Developed a C-based console application for file navigation, content search, and in-place editing with optimized performance.
- Fuzzy Logic-Based Traffic Light Control — Developed a MATLAB fuzzy logic system to optimize green light duration using real-time traffic flow data; integrated with a C# simulation for real-time visualization.

Publications

- Co-author: Implementation of a Decision Support Mechanism on a Mobile Platform Using Clinical Evidence-Based Dynamic Insulin Dosage Adjustment for Artificial Intelligence-Enabled Diabetes Care (AIDCARE) System, Engineering Proceedings, 2025.
doi.org/10.3390/engproc2025104027

References

Semih Kaya

REHİS Sektör Başkanlığı Test Altyapıları Ekip Lideri

ASELSAN

kaya@aselsan.com

Ankara, Türkiye

Prof. Dr. Adnan Kavak

Profesör, Bilgisayar Mühendisliği

Kocaeli Üniversitesi

akavak@kocaeli.edu.tr

Kocaeli, Türkiye