



Taner Can Bilgin

Nationality: Turkish | **Email:** tanercanbilgin@gmail.com

ABOUT MYSELF

I'm an Electrical & Electronic Engineering student really into embedded systems – basically, making hardware and software talk to each other to solve cool problems.

PROJECTS

10/2024 – CURRENT

Finishing Project

- Developed a two-wheeled unmanned ground vehicle running on Raspberry Pi Zero 2 W, capable of strafing with mecanum wheels, image processing and web-based control interface.
- Implemented mecanum wheel control system for enhanced mobility.
- Developed web-based control interface for remote operation.
- Integrated image processing capabilities for environment recognition.
- Optimized performance on resource-constrained Raspberry Pi Zero 2 W.

09/2024 – 12/2024

Hybrid System Design for Renewable Energy and Electric Vehicles

- Designed and analyzed a hybrid renewable energy system for residential electric vehicle charging using HOMER Grid simulation software.
- Researched and utilized solar radiation data, meteorological information, and energy load profiles specific to the Yalova region for system modeling.
- Performed calculations to determine daily and annual energy consumption, required system capacity, and overall economic feasibility, including investment costs, operating expenses, and payback period.

10/2023 – 09/2024

Kuzgun UAV

Avionic Team Leader and Software Team Member for the "Kuzgun UAV" project, developing an unmanned aerial vehicle with autonomous takeoff, landing, and flight capabilities, as well as object detection and tracking features.

- Selected and integrated avionics components for optimal performance
- Performed wiring, soldering, and designed electrical schematics
- Contributed to writing the official competition documentation
- Led the avionics team through development and testing phases

09/2022 – 11/2022

Ardupanel

Ardupanel is a solar tracking project designed to optimize the efficiency of solar panels by automatically adjusting their angle to follow the sunlight. In this project, I was responsible for coding, testing, and simulation.

- I developed the Arduino code to read the LDR values and control the servo motor to adjust the solar panel's angle.
- I tested the system to ensure accurate tracking and created simulations to verify its functionality.

09/2021 – 11/2021

DC Motor Control and Flip Flop PCB

- Designed and implemented a flip-flop and DC motor control circuit.
- Created the initial circuit layout using Fritzing and transferred it to a physical breadboard for testing.
- Designed a custom PCB using Proteus and prepared it for production.
- Printed the PCB layout and transferred it onto a copper plate using hydrogen peroxide-based etching.
- Successfully built and tested the final circuit on a custom-made PCB.

06/2020 – 09/2021

Kimmich Ball

- Developed Kimmich Ball, a Haxball bot with integrated Discord control and database functionality.
- Built the backend using Express.js to ensure responsive and scalable performance.
- Used Mongoose for managing and interacting with a MongoDB database.
- Integrated Discord.js to enable real-time control and communication via Discord.
- Combined web technologies and bot logic to create an interactive, database-driven Haxball automation tool.

● **EDUCATION AND TRAINING**

09/2021 – CURRENT Turkey
ELECTRICAL & ELECTRONIC ENGINEERING Yalova University

- Analyzing and designing electrical circuits and electronic systems.
- Understanding electromagnetic principles and signals.
- Working with control systems, electrical machines, and power systems.
- Programming microprocessors and applying artificial intelligence concepts.
- Conducting experiments and managing engineering projects.

Website yalova.edu.tr | Level in EQF EQF level 6

● **LANGUAGE SKILLS**

Mother tongue(s): **TURKISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B1
SPANISH	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

● **SKILLS**

Programming

JavaScript | Arduino Programming | PIC Programming | PLC Programming | Python | Embedded C/C++ | MATLAB

Hardware & Tools

PCB Design | TIA Portal | Linux | Proteus | AutoCAD | PSIM | Fusion 360 | Raspberry Pi | Git

Self-assessment

Leadership | Teamwork