

---

# Halid Yıldırım

## Computer Engineer

Embedded System Developer, Instructor,  
Project Manager and Mechanical Designer

At first, every project starts with endless ideas and solutions in mind. A good engineer must know how to aim for the one that best suits their needs. This is done by correct assessment of the requirements, knowing limits of the resources, capabilities of your team, current state of art technologies in the field that the project lives on and having the right tools to do so. My whole journey from childhood to graduation, I learned all of these things with lots of time to experience in lots of challenging projects.

### Experience

---

**Project Consultant - Kreatif İşler, Eskişehir, 03/2026 – Today**  
<https://www.kreatif-isler.com/>

- Advised a multi-disciplinary team on the design and execution of a competitive robotics platform for TEKNOFEST Robolig 2026.
  - Guided the team through the full project lifecycle, from initial conceptualization and technical documentation to final prototype testing.
- 

**Embedded Project Developer (Intern) - Kehribar Tech, Ankara, 07/2024 – 08/2024**  
<https://www.kehribartech.com/>

- Temperature Control System using PID Controller with a microcontroller
  - UART Serial interface over Wi-Fi using TCP socket with ESP8266
- 

**Microcontroller & Robotics Projects R&D Technician and Robotic/Python Instructor - Kreatif İşler, Eskişehir, 01/2023 – 09/2024**  
<https://www.kreatif-isler.com/>

- Python, Robotics, Arduino, Game Development with Godot, Lego Spike Instructor for students aged 8 to 16.
- Research and Development on a microcontroller based development board. My roles over the project were circuit designing, production end testing, technical documentation.

---

[www.halidyildirim.com](http://www.halidyildirim.com)

[halidyildirim64@gmail.com](mailto:halidyildirim64@gmail.com)

+90 (531) 823 6780

[linkedin.com/in/halidyildirim](https://linkedin.com/in/halidyildirim)

[github.com/SMDHuman](https://github.com/SMDHuman)

---

### Languages

Turkish (Mother Tongue)  
English (Advance Level)

---

### Education & Courses

**Computer Engineering**  
**Ahmet Yesevi University,**  
Kazakhstan – Turkish University  
09/2022 - EXPECTED 06/2026

**Robotic Coding Instructor**  
**Certificate - Gedik University,**  
Istanbul - 09/2021 – 10/2021

---

### Skills

- *Programming Languages:*  
**Python, C\C++**
- *Frameworks:*  
**Arduino, PlatformIO, ESP-IDF, Pico-SDK**
- *CAD Programs:* **Fusion360, OnShape, EasyEDA**
- **3D Printer** maintenance & repair, slicer programs & printing optimization
- Advance Sport Climber and Route Setter
- Class B Driving License

## Awards

- TUBITAK 52.High School Students Research Projects National Competition Awarded the Third Prize in Robotics & Coding 08/06/2021
- INSPO 2021 International Science Projects Olympia Awarded the First Prize in Engineering 05/05/2021
- TUBITAK 52.High School Students Research Projects Regional Competition Awarded the Frist Prize in Robotics & Coding 30/03/2021
- Awarded as ElectroMaker of the Month November 2022 - 05/12/2022 with the project LOTP Robot Dog Prototype 2 by Electro{Maker} Community.
- Promoted as a guest speaker to the event of r/Robotics Reddit community on July 2022 for introducing Modular Quadruped Robotic Vehicle (Robot Dog) LOTP V2.

## Projects

### BitBoard Bir

*Real-Time Logic Simulator  
Dev-Board*



- Has a circuit simulator & generic logic simulator can be seen its own display
- Simulate circuits up to 10 kHz
- 8 combinable expansion packs
- 9 axis IMU Pack for sensing movement and direction
- Environment Pack (light, humidity, temperature sensors and barometer)
- Controller Pack (2 joysticks, 2 switches, 4 direction buttons, and 2 controllable LEDs)
- Robot Pack (capacity to control up to 14 servos and 2 DC motors)
- Battery Pack with 1 Li-Po battery
- VGA Pack with a VGA port to display images on the monitor
- Keyboard Pack (60 keys with mini keyboard layout)
- Prototyping board (for making expansion packs)

### Robot Dog V2

*TUBITAK Awarded Project  
Modular Quadruped Robot*



- Designed with Fusion 360 and printed with Anet A8 (3D Printer)
- Coded in Arduino language on Teensy 3.5 & Arduino
- Circuit Diagrams designed on Fritzing
- Modular structure (Lidar, Drone, Gas detection)
- Sensors Capacity: Lidar, Gas detection, Pressure sensors, Gyroscope, GPS, Wi-Fi connection
- Autonomous features (Avoiding obstacle, maintain balance, pressure control)
- PI (Proportion - Integral) control
- Inverse Kinematics & Kinematics formulas applied
- Remote Controller access through Wi-Fi
- FPV Camera and Monitor setup
- Open Source <https://github.com/SMDHuman/LOTPRobotdog2>

### SP32-CAM Multi-Point Tracker

*3D Motion Tracker System*



- Multi-point infrared tracking using ESP32-CAM modules
- Seamless inter-camera communication via ESP-NOW protocol
- Real-time performance at ~10 FPS under default configuration settings