# **EKREM TURAN FIRAT**

#### Power Electronics Design Engineer Candidate

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## **Education**

# Bachelor's Degree in Electrical and Electronics Engineering | Sivas Cumhuriyet Üniversitesi 2024 – Ongoing

- Entered the university as the top student in the department based on points, Grade point average: 3.27
- IEEE Student Branch PELS/PES Comittee Chairman

# Electrical-Electronics Technology Technical Degree | Cezeri Green Technology Vocational and Technical High School

2020 - 2024

• Grade paint average: 87/100

# **Experience**

## Undergraduate Student Researcher | METU Power Lab | Ankara/Sivas(Hybrid)

February 2025 – Ongoing

• Working on PCB Motor and drivers.

## Avionic Design Team Lead | Alpina Roket | Sivas

October 2024 - Ongoing

• Flight Control Computer and Payload Control Computer designs were made.

### Comittee Chairman | IEEE SCÜ Student Branch | Sivas

Kasım 2024 – Devam Ediyor

- I served as the chairman of the PES (Power and Energy Society) & PELS (Power Electronic Society) Committee.
- Participated in international symposiums.

#### Electronic Design Intern | Robolink Teknoloji | Yenimahalle, Ankara

March 2022 - August 2022 | Haziran 2023 - August 2023

- PCB designs for sale on topics such as Laser CNC controllers, Stepper Motor Drivers, Pulse Generators, ESP32 were made.
- Competencies such as SMD Soldering, Oscilloscope Usage, PCB Testing stages were acquired.

## Founder | Mergen Elektronik | Etimesgut, Ankara

June 2021 – Ongoing

• Personal project sharing platform | mergenelk.com

# **Projects**

### Switched Power Supply Design (SMPS) | Mergen Elektronik

June 2024 - October 2024

- A power supply design with a 150Watt AC-DC 0-30V output range was made on a 4-layer PCB.
- Project Documents

#### ESP32 Based Laser CNC Motherboard | Robolink Teknoloji

June 2023 – August 2023

 PCB design for ESP32 based Laser CNCs compatible with GRBL software was made on a 4-layer PCB

## Stepper Motor Driver | Robolink Teknoloji

March 2022 - July 2022

- A PCB design was made for stepper motor control and testing on a 2-Layer PCB without requiring software or an external controller.
- Project Documents

#### ESP32 Developing Board | Robolink Teknoloji

Ağustos 2022

• 2 An ESP32 development board has been designed for testing ESP32 based applications within the company on a 2-Layer PCB.

# **Organizations**

- 3. Uluslararası Enerji Günleri | Emerjide Yapay Zeka Sempozyumu | SCÜ 100. Yıl Kültür Merkezi December 2024
  - I worked as a technical team member and stand attendant in the organization.

# Language Skills

## **English**

• Listening: B1 | Reading: B2 | Speaking: B1 | Writing: B2

# **Digital Skills**

- Altium
- Autodesk EAGLE
- AutoCAD

- Fusion360
- Proteus
- LTspice