Ali Solak

Date of birth: 30/04/2000 **Phone number:** (+90) 5457393792

Email address: alisolak03@gmail.com

Website: https://www.linkedin.com/in/ali-s-a19567288/

Home: Istanbul (Türkiye)

ABOUT ME

I am currently continuing my **Master**'s studies in the Department of **Electronics and Communication Engineering** at **Yıldız Technical University**. I am keen to enhance my proficiency in RF/Microwave and Hardware Design.

WORK EXPERIENCE

Hardware Design Engineer - PAVO Group

[05/01/2026 – Current]

- Responsible for RF and hardware design for **Base Station** projects.
- Designed a transistor-level **RF Power Amplifier** operating at **2650 MHz** with **+40 dBm** output power using **Keysight ADS.**
- Designed **IC-level** power amplifier circuits operating at **800, 850, 900, 1800, 2100, and 2600 MHz** with output power **< 2W** using **Altium Designer.**
- 3.3 - 3.8 GHz WideBand 4-Way **Wilkinson Power Divider** design.
- Designed and integrated hardware systems using communication interfaces such as **SPI, I2C, UART, RS-422, RS-485**, and **Ethernet.**
- Configuration of the DSP blocks on **SDR boards,** including the implementation of all necessary parameter settings.
- Performed hardware troubleshooting and repair of PCBs manufactured for defense industry companies such as **ASELSAN** and **BAYKAR.**

- Designed electronic hardware in accordance with **MIL-STD-461/810/704, DO-254**, and **EN61000** (Surge/Burst/ESD) requirements.

Internship - PAVO Group

[17/02/2025 – 17/06/2025]

- Performed RF measurement, characterization, and validation using **oscilloscope, vector network analyzer (VNA), spectrum analyzer, and power meter.**
- Performing harness design of existing schematics using **Altium Designer.**

Internship - Femko EMC Laboratory

[01/08/2024 – 15/09/2024]

- Performed EMC and LVD tests on Class I, Class II, and Class III devices.
- Tested devices according to IEC 60335, IEC 61000, and IEC 55014 standards.
- Suggested hardware improvements to increase safety and electromagnetic compatibility.

Internship - General Life

[03/07/2023 – 10/10/2023]

I interned at General Life's R&D department, a company specialized in smart room thermostat production.

- Worked on; Texas Instruments MSP430FR, Nuvoton ML56, Abov MC96F microprocessors.
- Schematics and layout design using **KiCad.**
- **Circuit simulations using LTspice.**

PROJECTS

Graduation project supported by TÜBİTAK : In my graduation project supported by the TÜBİTAK 2209-A program, I developed a wireless transmitter - receiver system.

- 2.4 GHz operating frequency
- Integrated front-end module (LNA + PA)
- P1dB is +22 dBm
- Noise figure is 2.5 dB
- 8 channels (5 analog, 3 digital)

REFERENCES

Associate Professor İlhan BAŞTÜRK - Manisa Celal Bayar University

Contact information will be provided upon request.

Süleyman URMAT - Co-Founder / Hardware Design Director at PAVO Group - Andasis

Contact information will be provided upon request.