

# Semihcan Seven

UC Berkeley, Cory Hall

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## About

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EECS PhD student at UC Berkeley focused on analog and mixed-signal IC design for biomedical applications. I believe that success comes from continuously improving yourself, and I strive to embody this principle every day.

## Education

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### University of California, Berkeley

*Ph.D. in Electrical Engineering & Computer Sciences (EECS); GPA: 4.0*

– Anwar Lab. PI: Prof. Mekhail Anwar

**Berkeley, USA**

*08/2025 – Present*

### Middle East Technical University

*B.S. in Electrical & Electronics Engineering; CGPA: 3.88 / 4.00*

– Specializing in electronics option, taking advanced solid-state devices and digital/analog integrated circuit design courses.

– Successfully designed an RF-based Antenna Tracking System for the term project.

**Ankara, Türkiye**

*08/2020 – 06/2025*

## Professional Experience

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### Undergraduate Researcher, École Polytechnique Fédérale de Lausanne

*Prof. Giovanni Boero*

– Designed and optimized an experimental setup and characterized superconducting quantum interference devices (SQUIDs).

– Characterized complex quantum devices utilizing Josephson junctions.

– Gained significant research experience and collaboration skills.

**Lausanne, Switzerland**

*07/2024 – 09/2024*

### Undergraduate Researcher, Quantum Devices & Nanophotonics Group, METU

*Prof. Cengiz Besikci*

– Conducted literature research on long- and mid-wave quantum well infrared photodetectors (QWIPs).

– Actively worked in cleanrooms, gaining hands-on experience in photolithography and molecular beam epitaxy (MBE) growth processes.

– Performed characterization of the fabricated devices.

**Ankara, Türkiye**

*10/2023 – 05/2024*

### Candidate Engineer, Asisguard Savunma San. Tİ.C. A.Ş.

*Embedded Hardware Engineering*

– Developed custom drivers on STM32 processors for task-specific applications and specialized in embedded hardware engineering.

**Ankara, Türkiye**

*08/2023 – 12/2023*

### Engineering Intern, Plan-S Satellite and Space Technologies

*Microwave Engineering*

– Designed and characterized X-band (8–12 GHz) microwave filters for space applications.

– Voluntarily taught and built SatNOGS ground stations for high school and first-year undergraduate students.

**Ankara, Türkiye**

*07/2023 – 08/2023*

## Achievements

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### CanSat Competition 2nd-Place

*American Astronautical Society*

– Won 2nd place globally in the CanSat model satellite competition hosted by Virginia Tech.

– Responsible for hardware design and embedded software. Designed the flight computer and oversaw the sensor fusion process.

**Virginia, USA**

*06/2023*

### SA Cup 2023 - Finalist, SPACEPORT AMERICA CUP

*Intercollegiate Rocket Engineering Competition*

– Flew from Virginia to New Mexico right after the CanSat Competition to launch our rocket.

– Successfully launched the rocket and received the Spot Award for our unique nose cone design thanks to our mechanical team.

**New Mexico, USA**

*06/2023*

### 2023 Mid-Altitude Rocket Competition - Finalist

*Teknofest Aerospace and Technology Festival*

– As the electronics team, we designed the avionic electronics and flight computer.

**Ankara, Türkiye**

*05/2023*

## Core Skills

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**Analog & Digital Design:** VLSI design (Cadence), FPGA digital system implementation (Verilog/VHDL), PCB design (Altium Designer).

**Embedded Software Engineering:** Microprocessor-specific driver development, Sensor fusion, experience in C/C++.

**RF & Communication Engineering:** Signal processing with MATLAB, Software-defined radios (VHF/UHF bands), X-band microwave filter design (AWR Design Environment), Proficient in serial peripheral interface (SPI) protocol.

**Experimental Research:** Automation of complex experiment setups with LabVIEW, Characterized cooled (LN2) infrared sensors, Tested superconducting quantum interference devices in liquid helium.

## Languages

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**English:** TOEFL (2024): 110    **Turkish:** Native Speaker