Dora Kuflu

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Education

University of Michigan **Ann Arbor, MI**
B.S.E in Computer Engineering, December 2025

- **GPA:** 3.98/4.0
- **Honors & Awards:** EECS Collaboration, Respect, and Inclusion Award; James B. Angell Scholar (2x), University Honors/Dean's List (3x), William J. Branstrom Prize
- **Relevant Coursework:** Computer Organization, Logic Design, Signals and Systems, Electronic Circuits, Programming and Data Structures, Discrete Mathematics, Technical Comms for Electrical and Computer Science
- **Organizations:** Eta Kappa Nu – Beta Epsilon Chapter, Michigan Research and Discovery Scholars, Michigan International Student Society, Turkish Student Association

Experience

SPARK Electric Motorcycle Racing **Ann Arbor, MI**
High Voltage Hardware Engineer *January 2024 – Ongoing*

- Redesigning the interface PCB to receive and distribute power signals more efficiently across the Junction Box.
- Implementing power switching within the High Voltage Junction Box and power delivery between surrounding systems.
- Managing telemetry and communications between different systems of the motorcycle using the CAN interface.

University of Michigan Solar Car Team **Ann Arbor, MI**
Microsystems Hardware Engineer *September 2022 – May 2023*

- Utilized Altium Designer to redesign economizer PCBs of the car reducing theoretical energy loss by 55%.
- Gained proficiency in equipment such as oscilloscopes, power supplies, and waveforms generators by assembling and testing electronic circuits.
- Coordinated with industry professionals in project presentations and design reviews.

Interactive Sensing and Computing Lab – University of Michigan **Ann Arbor, MI**
Research Assistant *September 2022 – May 2023*

- Assisted in development of sensors that remove Personally Identifiable Information such as gender and skin color from audio and video data.
- Utilized Fusion 360 and GrabCAD to design and 3D print CAD models of custom power supply components.
- Built and maintained Linux based Proxmox virtual machine servers with multiple passthrough GPUs for high-performance computing tasks.
- Presented outcome at the Spring Research Symposium as a member of Michigan Research & Discovery Scholars.

Projects

Hi-Fi Amplifier Based on TI LM3886 Amplifier Chip
Circuit Design, PCB Design, Hardware Design *October 2023 – Ongoing*

- Building 38-50W stereo sound amplifier with 92.5 dB signal-to-noise ratio based on the LM3886 chip by TI.
- Designing circuit diagrams and PCBs for amplifier and power supply modules using Altium Designer.
- Selecting components based on datasheet specifications, input and output configurations, and cost.
- Utilizing Bantam PCB Mill and professional electronics analysis workbench to test and assemble amplifiers.

FPGA Based Four-Function Calculator
Verilog, Logic/RTL Design, Simulation *November 2023 – December 2023*

- Implemented four arithmetic operations and user interface using Verilog on the Altera DE2-115 FPGA.
- Designed optimally efficient datapath and transition tables required to execute functions swiftly and accurately.
- Simulated and tested correct operation and different clock frequencies using ModelSim and Intel Quartus Prime.

Skills

- **Technical:** PCB Design, Analog/Digital Circuit Design, Circuit Simulation, Logic Design & Simulation, FPGA Design, RTL Design, Assembly & Machine Code Simulation, Signal Processing & Systems, Raspberry Pi, Arduino
- **Software:** Altium Designer, Intel Quartus Prime, LTspice, ModelSim, Digilent WaveForms, Git, Linux/UNIX
- **Programming:** Proficient: C++, Intermediate: Verilog, RISC Assembly, C, MATLAB, Python
- **Languages:** Turkish, native; German, elementary level