Alex Moazzen

Kennesaw, GA | 770-906-2521 | alexmoazzen@yahoo.com | linkedin.com/in/alexmoazzen

A fourth-year electrical engineering student seeking creative opportunities to develop both professionally and technically. Looking to apply an inspired passion for problem solving to work alongside other engineers of diverse disciplines and create life-changing technology.

Education

Kennesaw State University — *January 2020 - Current*

Bachelor of Science in Electrical Engineering — *Marietta, GA*
- 3.50 Overall GPA, Graduating in May 2023
- Kennesaw State University President's List, 2020 and 2023

Chattahoochee Technical College — *January 2018 – December 2019*

Associate of Science in Interdisciplinary Studies — *Marietta, GA*
- 3.60 Overall GPA

Projects

- Created and simulated 5G antennas, antenna arrays, inset fed and quarter-wave patch antennas with matching impedances, and modeled Helmholtz coil electromagnetic behavior using CST software.
- Utilized ADS, CST, MATLAB, and EAGLE to build and test a wireless charging laptop battery for a MacBook Pro and synthesized the PCB layout.
- Creation of the housing for Diffuse Reflective Spectroscopy system using Solidworks, microcontroller interfacing with SPI using C++ to control voltage regulation with DAC, and signal characterization of DRS and NIRS with SNR measurements.
- Setup and calibration of Ultrasonic sensors connected to a wearable blind-spot detection device to detect pedestrians and objects for my senior project.

Skills

- Software: Linux (NixOS/Debian), C++, Python, Altium, ADS, CST, MATLAB, EagleCAD, Solidworks, Fusion360, AutoCAD, Revit, KiCAD, Simulink.
- Hardware: Oscilloscope, function generator, spectrum analyzer, VNA/SNA, H-bridge DC motor and servo control, multimeter, ultrasonic sensors, fiber optics, antennas.
- Learning: Linux, antennas, C, FPGAs, Embedded systems.

Interests

- RF, Microwave, and Antenna Engineering, Firmware and Hardware design, PLC and FPGA Programming, Signal Processing and Communication Systems.

Experience

Teaching Assistant — *January 2022 - Current*

Kennesaw State University — *Marietta, GA*
- Developing communication by assisting students in lab with design procedures, LTSpice, MATLAB, VHDL, and schematic analysis for Digital Logic Design and Circuits I.

Kitchen Personnel — *August 2017 – January 2020*

Panda Express — *Acworth, GA*