Aiden Wenzel

Ann Arbor, MI wenzel.aiden@outlook.com github.com/aiden-wenzel

Education

University of Michigan

Ann Arbor, MI (September 2023 - May 2027)
GPA: 3.45/4.00
BSE, Electrical Engineering
Minor, Computer Science and Music

Experience

Coretek

Technical Support Specialist (May 2024 - July 2025)
Worked with HTML, CSS, and C# to develop intuitive ASP.NET UIs.
Used C# APIs to pull cloud resource information from MS Azure and ticket information from ServiceNow.
Used KQL to query and summarize cloud resource analytics in Azure dashboards.

Skills

Programming

Matlab: Organized data, processed images, and plotted data.
C++: Substantial knowledge of STL. Implemented numerous algorithms and data structures from scratch.
C: Programmed embedded control systems for autonomous robots.
Python: Built deep learning models with PyTorch and processed data with Pandas, NumPy, and Matplotlib.
LaTeX: Wrote elegant, concise lab reports and homework assignments.

Unix

Worked with Debian-based Linux distributions such as Ubuntu and Mint.
Familiar with terminal-based text editing using Vim.
Experience with basic terminal utilities such as grep, git, make, and tmux.

Circuit Analysis

Waveforms: Analyzed analog signals in AC and DC circuits with an Oscilloscope.
LTspice: Simulated analog circuits.
Logisim: Simulated digital logic circuits.
ModelSim: Simulated digital logic circuits using Verilog HDL.

Projects

Fractal Visualizer | C++

Utilized OpenGL APIs to accurately visualize the Mandelbrot set and Julia sets.
Implemented custom panning and zoom functionality for near-infinite zooming into complex geometries.

Conway's Game of Life | C++

Wrote custom implementation of Conway's Game of Life using SDL.
Customized build system and dependency management with CMake.

Instrument Recognition Software | Python

Worked with a team of 3 other engineering students to build an instrument recognition app.
Input audio data would be processed using the Librosa library. Harmonic overtones in audio samples would be extracted using the FFT algorithm.
Processed audio data would be used to train a CNN which would take audio files as input, process them, and predict what musical instrument is featured in the sample.

Extracurriculars

Michigan Marching Band

Dedicated approximately 20 hours each week to rehearsals and performances in the Big House.
Performed at the Big Ten Championship against the University of Iowa 2023, and the ReliQuest Bowl against the University of Alabama in 2024.
Initiated as an official brother of $K K \Psi$, the National Honorary Band Fraternity.
Performed with the Michigan Hockey Band at Yost Ice Arena.