1 EDUCATION

1.1 University of Michigan

- Major, Electrical Engineering (BSE)

- Minor, Computer Science

- GPA: 3.45/4.00

2 PROFESSIONAL EXPERIENCE

2.1 Coretek Services

- 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.

3 SKILLS

3.1 Programming Languages

C, C++, C#, Python, MatLab, Verilog HDL, LaTeX

3.2 Frameworks

OpenGl, SDL, PyGame, MatPlotLib, NumPy, Pandas, PyTorch

3.3 Technical Software

Simulink, Waveforms Oscilloscope and Wavegenerator, LtSpice, Modelsim, Jupyter Notebooks

3.4 UNIX

WSL2, Debian, grep, git, cmake, make, tmux, vim, ssh

4 PROJECTS

4.1 Fractal Visualizer

- 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.

4.2 Conway's Game of Life

- Wrote custom implementation of Conway's Game of Life using SDL.

- Customized build system and dependency management with CMake.

4.3 Instrument Recognition Software

- 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.

5 RELEVANT COURSE WORK

- **EECS 281 - Data Structures and Algorithms**:
- **EECS 370 - Computer Organization**:
- **EECS 200 - Electrical Engineering System Design**:
- **EECS 215 - Introduction to Circuits**:
- **EECS 216 - Signals and Systems**:
- **EECS 270 - Digital Logic Design**:

6 EXTRACURRICULARS

6.1 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 Kappa Kappa Psi ($KK\Psi$), the National Honorary Band Fraternity.
- Performed with the Michigan Hockey Band at Yost Ice Arena.