ETHAN T. BLAKE

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EDUCATION

Bachelor of Science in Computer Science
Oregon State University

Bachelor of Music in Vocal Performance

Arizona State University

December 2022

GPA: 3.87 May 2018

GPA: 3.84

PROJECTS

CS344 Smallsh GitHub

Built using C in Linux

• C program that mimics some Bash Shell functionality including ls, <, > pwd, cd, etc.

AQ6331-Spectrum-Analyzer-GUI

GitHub

- Built with Python
- Used libraries Tkinter, Pandas, Matplotlib, PyVisa, Multiprocessing, Threading
- This application runs 3 instruments synchronously to test how equipment performs across varied temperature.
- This application plots the data in real time, so that the test can be continuously monitored

LPF-Coefficient-Optimizer

<u>GitHub</u>

- Built with Python, used Multiprocessing to run multiple optimizations simultaneously
- Given a filtering system, I needed to find optimum filter coefficients to fit one sine wave to another.
- This optimizer works by comparing the sum of the absolute value of the differences in two sine waves, adjusting coefficients, and keep the adjusted coefficients if they produce a better result

Personal Website

Website | GitHub

Built with Python, Flask, Html5up, and hosted on Vercel

SKILLS

Languages: Python, C, C++, HTML, CSS, MASM 32-bit Assembly, JavaScript,

Technologies: PyVISA, Matplotlib, Tkinter, Pandas, Multiprocessing, Numpy, Ctypes, Cuda, OpenCL, Open MP Parallel Programming, Open MPI Parallel Computing, Linux, APIs, Flask

WORK EXPERIENCE

Undergraduate Learning Assistant: Data Structures

September 2021 – Present

Oregon State University

- Assist students during office hours, grade homework, and proofread assignment prompts and rubrics
- Developed python style guide for students

Software Engineer

May 2020 – Present

Grid Evolution Technologies, Scottsdale, AZ

- Write software for optical fiber test equipment
- Utilize PyVisa, Pandas, Tkinter, Matplotlib, and Multiprocessing to connect equipment and display realtime test data
- Leverage Excel and Python to filter and model electrical signals, including signal processing, Kalman noise filtering, and digital automatic gain control

AWARDS

PSAT National Merit Scholar