**ETHAN T. BLAKE**

ethanblake417@gmail.com • 480-400-5202 • [GitHub.com/EthanBlake417](https://github.com/EthanBlake417)

• [LinkedIn.com/ethan-blake-dev](http://www.linkedin.com/in/ethan-blake-dev)• [ethanblake-computerscientist.com](https://www.ethanblake-computerscientist.com/home_page.html)

EDUCATION

**Bachelor of Science in Computer Science** December 2022

Oregon State University GPA: 3.91

**Bachelor of Music in Vocal Performance** May 2018

Arizona State University GPA: 3.84

PROJECTS

**CS344 Small-SH** [GitHub](https://github.com/EthanBlake417/cs344-smallsh)

* C program in Linux that mimics some Bash Shell functionality including ls, <, > pwd, and cd.

**AQ6331-Spectrum-Analyzer-GUI** [GitHub](https://github.com/EthanBlake417/AQ331-Spectrum-Analyzer-GUI)

* Developed a Python application using libraries Tkinter, Pandas, Matplotlib, PyVisa, Multiprocessing, and Threading
* Ran 3 instruments synchronously to test how equipment performs across varied temperature
* Plotted the data in real time for continuous monitoring of the test

**LPF-Coefficient-Optimizer** [GitHub](https://github.com/EthanBlake417/LPF-Coefficient-Optimizer)

* Developed a Python optimizer using Multiprocessing to find optimum filter coefficients to fit one sine wave to another for a filtering system
* Used sum of the absolute value of the differences in two sine waves to adjust coefficients and keep the adjusted coefficients if they produce a better result

**Personal Website** [Website](https://www.ethanblake-computerscientist.com/home_page.html) | [GitHub](https://github.com/EthanBlake417/ethanblake-computerscientist)

* Built a website with Python, Flask, Html5up, and hosted on Vercel

SKILLS

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

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

WORK EXPERIENCE

**Undergraduate Learning Assistant: Data Structures** September 2021 – December 2022

Oregon State University

* Held office hours twice a week for 2 hours
* Performed 25+ weekly code reviews on student assignments
* Developed a student Python style guide

**Software Engineer** May 2020 – Present

Grid Evolution Technologies, Scottsdale, AZ

* Write software for optical fiber test equipment using PyVisa, Pandas, Tkinter, Matplotlib, and Multiprocessing to connect equipment and display real-time 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**