

ETHAN MYERS

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EDUCATION

- Undergraduate at the University of Colorado, Boulder. Physics & Math Major, *GPA 3.2*
- *Classes:* Quantum Mechanics I, Intro to Quantum Computing, Statistics, Electricity & Magnetism II
- *Expected Graduation:* May 2021

SKILLS

- *Python* — advanced proficiency, programming language of choice for nearly all projects
- *SQL, C++* — independently learned to basic proficiency for several projects
- *Windows/Linux* — functioned as a system administrator for Windows and Linux based computers
- *KiCAD* — designed boards for 3 separate projects, had them fabricated, and tested them successfully
- *Fusion360* — sketched, simulated and 3D printed several novel designs for various projects
- *Manual Machining and Fabrication* — designed and created custom parts on a mill and lathe
- *Photoshop, Mathematica, and Microsoft Office Suite* — worked with each package intensively for school

PROJECTS

UNIVERSITY OF COLORADO HIGH ENERGY PHYSICS RESEARCH 2020 - current

- Worked for Eric Zimmerman at CU Boulder building hardware and software for a particle detector
- Updated old Erlang software to interface with a HDO8058 oscilloscope using 488.2 and Python
- Tested, diagnosed, and fixed problems in old photomultiplier bases

VILLAGE GROUP, LLC 2015 - current

- Founded and managed a joint LLC with \$95,000 annual revenue
- Used Selenium to automate around extensive reCAPTCHA v2 challenges in Python
- Built a custom inventory management tool with eBay APIs, Google Sheets, and Python

WIRELESS GARDEN MONITOR 2017 - 2018

- Designed a custom PCB with Wifi, low quiescent boost converter and battery management system
- Included I²C, OneWire, and UART sensor inputs for a variety of environmental sensors
- Utilized a time series database and local MQTT broker to graph historical data on a Raspberry Pi

VOICE MODULATOR 2019

- Designed a totally analog voice modulator capable of shifting pitch in real time
- Implemented a variable frequency quadrature oscillator based on a Wein bridge oscillator
- Used exclusively discrete components, except for multiplier stage and final audio amplifier

EMPLOYMENT & VOLUNTEERING

- CU Boulder, *Undergraduate Research* — designed software for a small scale particle detector 2020
- Physics and Math, *Tutor* — taught physics and math to high school students 2019
- Special Olympics Colorado, *Swim Coach* — assisted and mentored disabled individuals 2010-2017
- Walker and Dunlop, *Intern* — built property financial models for commercial real estate 2016
- Adidas, *Associate* — opened and closed the store regularly 2018