# **ETHAN MYERS**

ethan@ethanmye.rs | 303.809.1873 | ethanmye.rs

## **EDUCATION**

Undergraduate at the University of Colorado, Boulder. Physics & Math Major, 3.3 GPA *Expected Graduation:* May 2021

## **SKILLS**

- Python, C/C++ independently learned and wrote code for a variety of custom projects
- *KiCAD* designed 4 different circuit boards, had them fabricated, and tested them successfully
- Fusion360 sketched, animated, and 3D printed several novel designs
- Windows/Linux functioned as a system administrator for Windows, Mac, and Linux computers
- Manual Machining and Fabrication designed and created custom parts using aluminum and steel
- Photoshop, Mathematica, and Microsoft Office Suite worked with each package intensively for school

## **PROJECTS**

# CUSTOM 3D PRINTER

2013 - 2018

- Built a custom 3D printer incorporating linear rail, heated bed and ACME leadscrews
- Modified existing firmware to suit unique geometry
- Improved reliability and wrote custom software to support additional improvements

## VILLAGE GROUP, LLC

2015 - 2018

Founded and managed a joint LLC with \$25,000 annual revenue

#### WIRELESS GARDEN MONITOR

2017 - 2018

- Designed a custom PCB with Wifi, low quiescent boost converter and battery management system
- Included I<sup>2</sup>C, 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

## HIGH TEMPERATURE KILN

2018

- Formulated a high temperature (>1200 °C) insulating refractory material for use in an electric kiln
- Reverse-engineered existing patent and technical data to create a more effective refractory
- Built a standardized testing apparatus to validate formulas consistently to organize trials

#### GEIGER COUNTER

2015 - 2016

- Designed a small Geiger counter based on the Soviet SBM-20 tube
- Built a 400V solid state single stage boost converter and counting mechanism
- Based schematic solely on discrete parts, with foldback current limiting and a bleeder resistor

## **EMPLOYMENT & VOLUNTEERING**

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 Sam's Club, Cashier — opened and closed the store regularly 2018 Castle Pines Village, Swim Coach — taught groups aged 4 - 16 basic swimming 2014-2017