# Zach Smith

#### Education

University of Texas | Austin, TX

Aug. 2019 - May. 2020

Undergrad mathematics and graduate computer science courses

Highlights: Abstract Algebra, Agda (type systems), Haskell, Real Analysis

Michigan State University | East Lansing, MI

Aug. 2012 - June 2017

Bachelor of Arts, Accounting - GPA: 3.4/4.0

## **Experience**

# Front-End Developer / Contractor

March 2021 - Present

CustomDFS | Remote

- Rebuilding and simplifying the front-end for a sports fantasy simulator using plain Javascript

## **Software Engineer and Product Lead**

July 2020 - Present

Twisted Fields | San Gregorio, CA

- Designed and implemented software and hardware of a smart irrigation system with the stack Python, Flask, and Redis ran on Raspberry Pis and microcontrollers
- Designed and implemented a solar-powered wifi network over 127 acres with hardware and software from the Ubiquity ecosystem
- Developed third party tools on top of Ubiquity's Unifi Network software to help debug networking issues
- Saved \$10000+ in broken machinery and labor costs through implementation of custom IoT

## **Computer Science Intern**

Jan 2019 - May 2019

NASA | Hampton, VA

- Test engineer on a team of 10 students challenged to design an autonomous rover for a Mars retrieval simulation competition
- Identify non-compliant public-facing Langley websites, and facilitate their migration to log server traffic on Splunk
- Improved Splunk public-facing web server compliance by 12%

#### **Database Manager and Web Designer**

April 2018 - July 2019

Blockmaster Electronics | Elk Grove, IL

- Build and maintain a product database of over 20,000 unique part numbers, each with 30+ specs, with links to pictures and engineering drawings
- Create a consumer-focused company website and integrate the database so that it's filter-able and optimized for search

**Tax Intern**BDO USA, LLP | San Francisco, CA

January 2017 - April 2017

- Worked on a team of 8 to complete the returns of a venture capital fund consisting of 50+ total entities while managing client expectations
- Modified company excel templates to improve efficiency, created new templates to manage hedge fund data, and led intern excel
  trainings to solve common first-year efficiency and data management problems

## Leadership / Extracurricular Activities

#### **Unmanned Aerial Vehicle Team (Computer Vision)**

Aug 2019 - May 2020

UT Austin | Austin, TX

- Led a group of three students on the computer vision team. Our goal was to locate and identify alphanumeric symbols and their degree of rotation from birds-eye-view images. We apply various machine-learning tools (YOLO v3, TensorFlow Hub) to self-generated data
- Correctly identify 50% of data where there exists one symbol

Musician Aug 2019 - May 2020

Wiccit (band) | Austin, TX

- Perform original music in the band Wiccit in venues around Austin

#### **Programming Skills**

Languages: Python, Javascript, Haskell, Bash

Technologies: Redis, Flask, Linux, Vim, embedded systems, Git