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

Full Stack Developer   March 2021 - Present
CustomDFS | Remote
  - Building an MVP for a sports fantasy simulator. 10 - 50 monthly users
  - Functionality overview: user sign up and authentication, user portal, editable table fed into Monte Carlo simulation hosted on AWS

Software Engineer and Product Lead   July 2020 - Present
Twisted Fields | San Gregorio, CA

  Tech
  - Designed and implemented software and hardware of a smart irrigation system ran on Raspberry Pis and microcontrollers. 1 - 4 daily users
  - Developed third party data collection and visualization tools on top of Ubiquity's Unifi Network software to help debug networking issues
  - Modified Li-Ion Ranger (4x4 golf cart) to passively charge from solar power. Active and passive circuit design, testing, debugging, and documentation

  Management
  - Managed daily work and goals of non-tech staff to a 20x increase in egg production and sales over one year (~50 hens grown to ~1000, $20 daily to $350+). This led to a new self-sustaining business sector of the farm

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
  - Built and maintained a product database of over 20,000 unique part numbers, each with 30+ specs
  - Created a consumer-focused company website and integrate a filter-able database optimized for search

Leadership / Extracurricular Activities

Unmanned Aerial Vehicle Team (Computer Vision)   Aug 2019 - May 2020
UT Austin | Austin, TX
  - Led the data pipeline and generation group of three students on the computer vision team. Our goal was to locate and identify rotated alphanumeric symbols and their degree of rotation
  - Trained a machine-learning model (YOLO v3) to correctly inference 50% of data where there exists one symbol (18x better than random chance)

Musician   Aug 2019 - May 2020
Wiccit (band) | Austin, TX
  - Perform original music in the band Wiccit in venues around Austin

Programming Skills

Languages: Python, Scala (w/ ZIO), Haskell, Javascript   **Technologies**: Linux, React, Git, Redis, Flask, Vim