# Zach Smith

zach\_asmith@yahoo.com | aryzach.github.io | linkedin.com/in/aryzach | github.com/aryzach

#### Skills

Python | Haskell | Purescript | Javascript | Linux | Docker | Git | Ansible | MLOps | Jenkins CI/CD | Vagrant | Azure | AWS | networking | microservices | virtualization | DevOps | backend | hardware | circuit design

## Experience

# **Lead Software Engineer**

Oct 2021 - Present

iMetalx | Sausalito, CA

Defense Tech

- · Led software development of a novel communications technology to meet requirements for US Air Force, leading to a successful live demonstration for DoD stakeholders
- · Product Manager on android development, our primary revenue source
- · Designed and simulated proof-of-concept system to mitigate space debris for the US Space Force
- Portfolio of work led to winning research proposals with US Space Force for \$1.7MM and prime contractor revenue of \$380k

# Software Engineer, Contractor

Aug 2022 - Nov 2022

T-Do, Inc. | Remote

- · Wrote and open-sourced the Purescript virtual DOM library, Snabbare, for a startup's MVP
- · Currently used in a live private beta as part of the project at T-Do.com

Roboticist

May 2020 - Aug 2021

Twisted Fields | San Gregorio, CA

AgTech

- · Developed software and hardware of a smart irrigation system in part of larger effort to create tooling for small farms
- · Designed and implemented circuit to passively charge LFP electric vehicle from solar power
- · Mechanic on a solar-powered farming robot built on a Raspberry Pi

#### **Computer Science Intern**

Jan - May 2019

NASA | Hampton, VA

- · Robotics test engineer on a team of 10 students challenged to design an autonomous rover for a Mars retrieval simulation competition
- · Analyzed 500+ internal and external NASA websites, and bringing up to meet security compliance

# **Projects**

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

Aug 2019 - May 2020

UT Austin | Austin, TX

- · Led the MLOps group of three students on the computer vision team to build data pipeline and generation tools
- · Increased model inference accuracy from 3% to 50% and integrated model into larger software system

**Musician** Aug 2019 – May 2020

Wiccit (band) | Austin, TX

· Wrote and performed original music with the band Wiccit in venues around Austin

## **Education**

## University of Texas | Austin, TX

Aug 2019 - March 2020

Audited undergrad mathematics and graduate computer science courses

# Michigan State University | East Lansing, MI

Sept 2012 - May 2017

BA, Eli Broad College of Business