# Tyler Alamo Port

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#### EDUCATION

California Inst. of Technology [Caltech], B.S. in Computer Science: 3.1 GPA Sep. 2015 - Jun. 2022

• Studied Computer Science with a focus on low level GPU Programming for parallelizing and accelerating a variety of algorithms. Taught and composed material for several courses.

#### WORK AND EXPERIENCE

# Carl Zeiss AG., Germany, System Software Engineer

March 2023 - March 2024

- Subject matter expert regarding Graphics Processing Units (GPUs) and Field Programmable Gate Arrays (FGPAs)
- Worked on and assisted in various projects making use of High Performance Compute.

# Caltech, Lecturer and Teaching Assistant in Computer Science

April 2018 - June 2022

- Translated and reimplemented assignments for CS24 (Operating Systems) from C to Rust.
- Lectured, held office hours, developed material, and graded Nvidia CUDA assignments for CS179 GPU Programming.
- Taught relational database theory and use with Structured Query Language (SQL) in CS121.
- Taught Rust programming for the CS11 Rust language workshop.

#### North American Partners in Anesthesia., Software Engineering Intern

Dec 2019 - August 2020

- Automated inter-database information validation between Cactus and the National Provider Database.
- Assisted with automation testing and development interfacing with GUI based terminal systems for healthcare data processing.

# Tinder Inc., Software Engineering Intern

June 2018 - August 2018

- Researched and implemented a configuration that walked the graph of microservice dependencies to determine what services were degraded based on a dependency.
- Used and extended Grafana and Prometheus to automate status page generation.

#### NASA Jet Propulsion Lab, Software Engineering Intern

January 2018 - June 2018

• Worked on trajectory finding and visualization for the Europa Lander mission.

## DoubleVerify Inc., Bot Fraud Analyst Intern

June 2015 - September 2015

- Infected machines with malware and analyzed the collected network traffic for evidence of botnet based ad fraud.
- Researched botnet forums for new developments in the field, especially the prevalence of voluntary botnets known as traffic exchanges, and YouTube based revenue generation.

#### KarmaFleet, Lead Software Engineer and Systems Administrator

January 2015 - Febuary 2016

- Wrote a web application in Flask (Python) for recruitment, customer relations management, human resources, and internal affairs. Included automated testing and continuous integration.
- Maintained multiple applications for VOIP, market management, expenses, and claims.
- Containerized application development and deployment.
- Linux server setup, administration, and maintenance.

# **GLO Gaming**, Director of Technology

September 2012 - September 2014

- Built office storage server and network infrastructure including JUNOS configuration.
- Helped develop Salesforce integrations.
- Built and maintained OpenVPN and NAS instances.

#### Skills

- <u>Lanugages:</u> Rust, Python, C/C++, CUDA/OpenCL/HIP, C#, Haskell, VHDL, OCaml, Javascript, SQL, Java/Kotlin, Mathematica.
- <u>Platforms/Technology:</u> Linux (Gentoo, Arch, RHEL/Fedora, Debian/Ubuntu), Windows, MacOS, BSD, FPGA (Intel, AMD), Git, Docker.
- Specialties: GPU programming, functional programming, computer graphics, relational database design and managagement, graph theory, systems administration, DevOps.