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 (FPGAs)
- 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

- Lanugages: **Rust**, Python, C/C++, CUDA/OpenCL/HIP, C#, Haskell, VHDL, OCaml, Javascript, SQL, Java/Kotlin, Mathematica.
- Platforms/Technology: 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.