Aiden **Szeto**

916-990-3708 | aszeto35@gmail.com | aidenszeto.me | aidenszeto | aidenszeto

Education

University of California, Los Angeles

B.S. in Computer Engineering, GPA: 4.0 *Graduating Jun. 2024*

- Relevant Coursework: Data Structures and Algorithms, Computer Architecture, Digital Logic Design

Skills

Advanced: C/C++, Python, JavaScript, Git, Linux/Unix, AWS, Node.js, React, Express, MongoDB, Firebase, Flask

Proficient: Java, SQL, HTML/CSS, x86 Assembly, TypeScript, Golang, Google Cloud, FreeRTOS, OpenMP, Loopback

Learning: Verilog, Rust, Django, Docker, ZeroMQ, Microsoft Azure

Experience

NASA Johnson Space Center | Software Engineer Intern - nasa.gov/specials/artemis/ *Aug. 2021 - Dec. 2021*

Linux, C, Splunk

- Working on Artemis Gateway command and data handling team to integrate time-triggered ethernet into network protocol
- Developing live-feed simple network management protocol (SNMP) and visualization with Splunk

CDK Global | Software Engineer Intern - fortellis.io *Jun. 2021 - Aug. 2021*

AWS, Node.js, React, Terraform, Artillery

- Constructed and published serverless vehicle leasing API with AWS Lambda and DynamodDB and implemented API into Fortellis marketplace with Apigee proxy, achieved near 100% uptime
- Automated API performance testing with Artillery to tune average load, latency, and error rates through horizontal scaling
- Improved one-to-one API support on Fortellis Developer Network and Platform, which supports 150M API transactions per year

ELFIN CubeSat | Flight Software Developer - elfin.igpp.ucla.edu *Oct. 2020 - Present*

C, Python, ZMQ, FreeRTOS

- Developed embedded systems code in C for the SmartFusion2 SoC, including a real-time operating system task to parse and handle over 10,000 commands sent to flight computer over UART
- Architected end-to-end satellite communications protocol with application-layer microservice design and Python server. Includes 3 network layers and supports virtual channels, APIDs, retransmission, frame acceptance, and more.
- Integrated communications protocol into the UCLA EPSS department's official electronic particle detector testing process

NomΛd | Co-Founder & Chief Technical Officer - visitnomad.com *May. 2020 - Present*

AWS, Node.js, React, Express, MongoDB, Python

- Earned $50k+ in non-diluted funding, acquired 20+ listings in 2 countries, and completed UCLA Anderson Venture Accelerator
- Directed product development and company vision, lead Agile team of 24 employees over the course of 1 year
- Automated client and server codebase CI/CD on AWS Elastic Beanstalk and Google Firebase via GitHub workflows

UCLA Micro and Nano Manufacturing Lab | Researcher - cjkimlab.ucla.edu *Oct. 2020 - Jan. 2021*

Node.js, React, Loopback, MySQL

- Automated database model updates for uploaded files, increasing file-sharing efficiency for chip designers by over 50%
- Overhauled application security by configuring Access Control Lists for more than 20 Loopback API endpoints

Projects

The C++ Command Shell (CPPCS) - github.com/aidenszeto/cppcs

C++, GCC

- Designed command line interface for C++ unit testing and scripting, with source/header file importing features
- Implemented automatic GCC compilation, error detection, and file importing optimized with less than 1 second delay

PearPy- pypi.org/project/pearpy

Python, PyPi, GitHub Actions

- Worked with teammates across the world to create and publish Python package for parallelizing processes
- Created test suites and benchmarks that showed up to 400% runtime improvement when using PearPy