Kento Okamoto

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Experience

Lithic (Backend Engineer)   July 2021 - November 2022
Tech Stack: C++, Python, Rust, Java, Postgres
- Migrated internal transaction definition to reflect future service integration
- Designed and implemented internal tooling to allow other engineers to modify exising customer transaction configurations
- Designed and implemented mock transaction endpoint service using **FastAPI** for end to end testing in a staged AWS environment
- Designed internal tooling with **Retool** to streamline workflows and empower cross-functional teams to safely execute system configuration changes
- Leveraged **Postgres** to triage and resolve customer issues

Splunk (Software Engineer)   December 2020 - June 2021
Tech Stack: C++
- Designed solution to prevent dataloss observed on Splunk technical add-ons

Arista Networks (Software Engineer)   July 2017 - November 2020
Tech Stack: C++(TACC), C, Python,
- Led software validation support for five 720XP series PoE switch development by coordinating with cross-functional teams (manufacturing, test, hardware)
- Wrote OS firmware for initial board bringup
- Designed and wrote system software for displaying on-device FPGA information using Python
- Created test infrastructure improvement for detecting product spontaneous reboots

Colorado School of Mines CS Department (Instructor)   January 2017 - May 2017
- Taught introductory C++ concepts to 60 students
- Course included Lectures, Exams, Homework, and extra help during office hours.

Ricoh America (Automation Tools Developer Intern)   May 2016 - August 2016
- Developed a full-stack web application for printer performance analysis using ASP.NET
- Webtool provides 300% more control for customer over previous tool
- Increased code resilience to future SQL database changes

Projects

App Launch Inference   August 2016 - August 2017
Tech Stack: Python, Wireshark
- Research security vulnerabilities by eavesdropping on app launch instances on Android devices
- Utilized scikit-learn to train and infer app network packets on each device
- Successfully inferred app launches with 90% or higher accuracy using Random Forest and SVM classifiers

Pool Table Recognition   April 2016 - December 2016
- Built C++ program to detect pool tables from a smartphone image using **OpenCV**
- Final image displayed a top-down perspective of the table

Skills
- Languages: Python, C++, Rust, Javascript
- Frameworks: Flask, Express.js, FastAPI
- Tools: Git, Docker, Jenkins
- Database: SQLite, Postgres, Mongodb

Education

Colorado School of Mines M.S.   May 2017
Computer Science

Colorado School of Mines M.S.   May 2015
Engineering Physics