# Samuel Sasaki

sammsaski.github.io

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#### **Technical Skills**

Languages: Python, JavaScript, TypeScript, Go, C++, Java, SQL, HTML/CSS, Bash

Libraries & Frameworks: React.js, React Native, Django, Django REST Framework, Node.js, Pandas, PyTorch, Numpy

Tools: Linux, Git, Docker, Ansible, CircleCI, AWS (EC2 & S3), Redis

## **Experience**

#### **Software Engineer**

## **Elementary Robotics**

Jan. - May 2022

Returned to the Edge Software team, an agile team responsible for all software that runs on edge compute devices and interacts with the cloud-connected product, as a full-time software engineer.

- Improved reliability by updating the **Python** testing suite to handle product configurations in a simulated environment.
- Constructed an API to write data from **Redis** stream corresponding to edge device inputs from hardware to a performance monitoring stream and created a dashboard to display the data.
- Investigated software performance and motivated decision-making for future sprints with detailed reports of findings.

#### **Software Engineer Intern**

#### **Elementary Robotics**

May - Aug. 2021

Member of Edge Software team.

- Increased flexibility in testing by adding an **Ansible** workflow that could run multiple testing configurations (CPUs, devices) at a time, which provided a more robust and streamlined CI/CD pipeline.
- Initiated the development of an internal code coverage comparison tool written in **Bash** and **Python** and architected an automated workflow for it on GitHub that brought awareness of 5+ repositories with code coverage less than 90%.

#### **Research Assistant**

#### Pomona College

Sept. 2022 – Present

Autonomous Robotics and Complex Systems (ARCS) Lab - a lab specializing in designing, modeling, and constructing of small, autonomous robotics and the computer vision models that inform their decision-making.

- Building a simulated environment for testing mathematical models of the movement of a hybrid-wheel robot.
- Creating and training a vision model to inform robot movement and designing the architecture for model deployment.

# **Education**

#### **GPA: 3.63**

#### Pomona College

**Graduation Date: Dec. 2022** 

- **Double major** in Computer Science, Mathematics with **relevant coursework**: Advanced Linear Algebra, Computational Statistics, Mathematical Data Science & Topic Modeling, Data Structures & Advanced Programming, Neural Networks, Computer Architecture, Managing Complex Systems, Reinforcement Learning.
- Awards: Pomona College Scholar, Summer Undergraduate Research Project (SURP) Grant Recipient.

## **Projects**

- Wishlist App (2022). A web app that allowed users to manage a wishlist using CRUD operations. React.js, Go.
- Location Analysis Mobile Application (2022). A mobile app that utilizes convolutional neural networks to recognize buildings on the Pomona College campus. Python, React Native, Tensorflow, Tensorflow.js.
- **Redoc** (2022). A web application designed to allow users to create customized real estate related documents as PDFs via autofilling information through the use of a form. **Python, React.js, Django REST Framework**.

## **Leadership Experience and Awards**

#### NCAA Div. III - Pomona-Pitzer Varsity Men's Water Polo 4-Year Starter & Team Captain

• 2021 Division III National Champion, 2022 SCIAC Offensive Player of the Year, 3x First-Team All-American.