Isabel Suizo

Pittsburgh, PA

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isabelsuizo.com

Education

Carnegie Mellon University

PhD in Computer Science

August 2023 - Present

Pittsburgh, PA

Advised by Justine Sherry and Theo Benson

University of California, San Diego

September 2018 – June 2022

BS in Computer Engineering, Minor in Economics

La Jolla, CA

Honors: summa cum laude, ECE department's highest distinction, GPA: 3.993/4.0

Honors & Awards

- Summa Cum Laude (June 2022)
- St. Ignatius of Loyola Outstanding Service Award (June 2022)
- Highest Distinction in ECE Department (June 2022)
- Henry Booker Award (June 2022)
- Provost's Honors (September 2018 June 2022)

Research Experience

Carnegie Mellon University

August 2023 - Present

Pittsburgh, PA

Graduate Student Researcher

- Advised by Justine Sherry and Theo Benson.
- Conducting large-scale measurement study of Starlink to evaluate the resilience of low-earth-orbiting (LEO) satellite networks from a routing infrastructure perspective and understand the impact of external conditions like cloud cover on LEO network quality.
- Using modern network tools like MDA tracerouting and MIDAR for router fingerprinting to unveil publicly hidden components of Starlink routing infrastructure.

University of California, San Diego

February 2021 – August 2022

Undergraduate Researcher

La Jolla, CA

- Advised by Geoffrey Voelker and Ariana Mirian.
- Completed undergraduate thesis, "Excavating Device Characteristics: Identifying User Behaviors via Network Traffic Flows" to measure the efficacy of common security practices. Designed ML model that achieved 99% testing accuracy in identifying IoT vs. non-IoT devices using features extracted solely from anonymized network traffic.
- Researched and identified mitigations for over 400 vulnerabilities to contribute to research project regarding system administrators' likelihood to fix vulnerabilities.
- Improved error logging system on data ingestion servers.

Work Experience

Google Cloud | Software Engineer

August 2022 - August 2023

- Designed and implemented a schema-agnostic ingestion feature to streamline the data ingestion process for recommendation and search models used in customers' e-commerce sites.
- Contributed to development of Generative App Builder, a new Cloud tool that allows customers to integrate Google LLMs into generic websites using customer-specified data.
- Ensured high availability of Retail services through on call duties including fixing production server issues and rolling out scheduled releases.

Nextdoor | Software Engineering Intern

June 2021 – September 2021

- Decreased process scaling workflow time by 93% by implementing dynamic scaling of asynchronous infrastructure tasks.
- Fortified security of users on Nextdoor app by building pipeline for Trust and Safety team using a third-party service for link verification of URLs posted on the platform.

Nutanix | Software Engineering Intern

June 2020 - September 2020

- Increased velocity through robust automation for testing new disaster recovery services and UI features using backend API calls and Selenium.
- Reduced storage costs for customers by implementing ML pipeline for migrating cold data to secondary storage.

Teaching Experience

Teaching Assistant

January 2021 - June 2022

Computer Science Department

University of California, San Diego

- Tutored theory-based, upper-division algorithms (CSE 101) for four quarters. Hosted weekly open-forum office hours and one-on-one sessions. Graded homework and exams. Monitored and responded to inquiries on online class forum, Piazza. Received 100% recommendation rate from students across reviews from 4 quarters.
- Tutored data structures and algorithms course (CSE 100) in C++ for one quarter. Assisted students with weekly programming assignments for five hours per week.

Service

Mentor

September 2020 - June 2021

EDGE Program

San Diego, CA

- Conducted workshops for both technical and soft skills for local high school girls interested in pursuing a degree in computer engineering.
- Met regularly with mentee over the course of a year to guide with college application process.