in LinkedIn **O**<u>GitHub</u> Personal Site

University of California, Santa Barbara Bachelor of Science, Computer Science

Dean's Engineering Honors | College of Engineering Honors

TECHNICAL SKILLS

- Python, Java, C++, JavaScript, React.js, Ruby on Rails, SQL, NoSQL, Scala, Clickhouse
- GCP, AWS, Firebase, MongoDB, REST, Kafka, Terraform, Docker, Kubernetes, BASH, Linux, Git, CI/CD

WORK EXPERIENCE

Cisco Meraki, Full Stack Software Engineer - San Francisco, CA

- Lead Engineer for "Active Testing" project which will proactively detect any network issues in a device.
- Built out sections of Assurance page, which is an overview of varying metrics of all Meraki hardware products within a network and assigns a score based on the metrics. Debugged scaling issues with the wireless, wired, and remote network health scoring pipelines with the release of this new customer product as it rolled out to customer networks.
- Developed endpoints for metrics such as: latency, authentication, association, DHCP/IP assignment, VPN tunnel \succ establishment at the client, network and organization level. Part of the effort to move data processing to ClickHouse.
- Added new alerts on poor ethernet link negotiation and beacon missing for access points. \succ
- Closely mentored a summer intern for a new alert and troubleshooting workflow for low power mode on Access Points. \succ
- Contributed to the onboarding process of two senior engineers on our team.
- Participated in engineering events: Extractathon code quality cleanup, Muleolympics bug hackathon, team onsites
- Taught Cisco's NetAcademy Cybersecurity course at San Jose City College. Tabled at LWT Conference in SF. Visited a customer site at College of San Mateo. Attended Grace Hopper Conference, Defcon, and Railsconf on behalf of Cisco. Gave a talk on Cloud IAM Security at Cisco's Women in Cybersecurity Summit. Did some paneling for the Cisco Panel Accelerate intern program.

Technologies: Ruby on Rails, React, Scala

Palo Alto Networks, Prisma Access Software Engineer - Santa Clara, CA

- Revamped notification and alert email microservice end to end to Python, GCP pub/sub, BigQuery, CloudSQL, Kubernetes.
- Created internal SRE notification endpoints and built automated testing for notification microservices.
- Lead and designed alert and incident customer notification profile project end to end in Java and GCP (CloudSQL, BQ and pub/sub). Notifications are delivered via email or webhook encrypted with GCP secret manager. Architected the technical design spec discussions and presented feature to broader UI, PM, and QA teams.
- Automated cloud database migration into microservice and automated confluence documentation used by 70+ engineers \succ org wide.
- Developed customer-facing APIs for security wifi product Okyo and added tool to auto create BigQuery SQL statements. \succ
- Presented research on new methods to collect monitoring telemetry for team code repositories. \succ
- Improved CI/CD by adding deployment and application verification for 55+ dataflow repos and 15+ GKE container repos.
- \succ Optimized AWS authorizer latency from >1700ms to ~12ms. Authorizer is invoked 80M times daily, cut cloud costs by 43%.
- Drove SSL certificate validation for all 152+ AWS API Gateway infrastructure endpoints for FedRAMP High compliance.
- Connected IAM authentication policies to all 230+ AWS lambda functions following zero trust methods for FedRAMP IL5. \succ
- Broke down certificate management monolith services to microservice architecture. \succ
- Filed a patent (US 20240154986) for a social engineering security awareness product. \succ
- \succ Mentored interns on our team and guided them with mentorship in professional development.
- Organized PANW's LGBTQIA+ Pride events, attended LWT conference and paneled some tech recruiting events. \succ

Technologies: Python, Java, SQL, AWS, GCP, SQL, Kubernetes, Docker

University of California Santa Barbara, Undergraduate Learning Assistant - CS148 & CS156 Jan 2021 - June 2021

- Mentored students for upper division project based courses on software development practices and application development.
- Taught a lecture and hosted class sections on web technologies and frameworks for the 6 student project groups.

Technologies: Python, Flask, React, JavaScript, MongoDB, Firebase, Springboot Java

Cisco Meraki, Full-Stack Intern - San Francisco, CA

- Built cellular usage trackers and graphs for Meraki's cellular gateway devices. Optimized cellular packet collection from 30s to 5s.
- Integrated new API endpoints for tracking cellular usage data and documented research for a telemetry patent. ≻ Technologies: Ruby on Rails, React, Scala

Palo Alto Networks, Prisma Access Software Engineer Intern - Santa Clara, CA

Built a distributed system framework to remotely run diagnostic commands on cloud firewalls and collect system info.

Sep 2020 - Dec 2020

Jun 2020 - Sep 2020

Feb 2023 - Present

Sep 2017 - Jun 2021

Aug 2021 - Feb 2023

Placed 2nd out of 50+ teams at PANW's internal hackathon by developing an educational social engineering application. Technologies: Python, AWS

ADTRAN, Software Engineering Intern (Part Time) - Santa Barbara, CA

> Designed an app end to end for 25+ service providers to edit router manifest files with version control on the cloud. Technologies: Python, Flask

Looker (Acquired by Google Cloud), Software Engineering Intern – Santa Cruz, CA

- > Developed a customized REST URL system for the company's data analytic dashboards.
- Created unit tests for new endpoints and fixed Ruby SQL injection vulnerabilities in an Agile environment. \succ
- > Built the foundations for a Pocket Edition Android app at an internal hackathon to show personal and shared dashboards.

Technologies: Ruby, SQL, React, TypeScript, Android, Java

SmartRG, Software Development Intern - Santa Barbara, CA

- Created automatic language localization for SmartRG's User Interface in 20+ new languages.
- > Established network packet interface to monitor real-time WiFi traffic status.

Technologies: Python, BASH, AngularJS, JQuery

PROJECTS

Independent Research under Professor Conrad

Created Java lab assignment and implemented code coverage for CS156 Advanced Applications Programming Course.

AR Sandbox Aquarium

Researched into 2D images to 3D object model conversion and created an Android app that lets users take their 2D fish drawings and convert them into 3D models in real time to place in their room in augmented reality.

Compurator

- Led team project to create an AWS serverless React/Python app that compares laptops through a browser extension. \succ
- Developed the backend REST lambda endpoints with Python and MongoDB to store web scraped laptop metadata and user data.

EEG Classification (Undergraduate Research Assistant at Four Eyes Lab, UCSB)

Worked on a deep learning Python model with PhD students on the relationship between electroencephalograms(EEG) and human computer interaction. A paper on the project was submitted to CHI 2020.

Type Type Revolution

Developed backend database and matchmaking algorithms for the server-less web game in JavaScript and Firebase at SLO Hacks.

Full project list and additional information on Github | Personal Site

LEADERSHIP

SB Hacks, Co-director and Sponsorship Team Lead

- Co-directed the 17 person team and lead sponsorship strategies of \$40k+ budget for SB Hacks, an 400-person hackathon at UCSB.
- Led the judging process, planned out the logistics, and coordinated marketing for SB Hacks VI in 2020. \succ
- Developed internal management tools in Python and contributed to the Node.js website (sbhacks.com). ≻

Society of Asian Scientists and Engineers (SASE), Webmaster Chair and Programming Committee Sep 2017 - Jun 2018

Developed the website (saseucsb.com) and organized the 2018 SASE Regional West conference of 200+ university students.

HOSTED WORKSHOPS AND SPEAKING EVENTS

Cisco's CWiCS Summit: Speaker	Nov 2023 •	SB Hacks VII: Intro to APIs	Jan 2021
SB Hacks: Hackathon Judge	Feb 2022 •	SB Hacks VII: Intro to Hackathons	Jan 2021
TechTogether New York: Intro to Android	Oct 2021 •	SB Hacks: Intro to Web Apps	Nov 2020
Girls in ICT Day: Panelist	May 2021 •	Helloo Hacks: Speaker	Aug 2020
Womxn Hacks 3.0: Intro to Android	Apr 2021 •	Emerging Alternative Internet: Student Panelist	Jan 2021
SB Hacks VII: Opening & Closing Ceremony	Jan 2021 •		Oct 2019, 2020
SB Hacks VII: Intro to HTML/CSS/JavaScript	Jan 2021		,

AWARDS

•	QWER Hacks: Best Hardware Hack	2021 •	SLO Hacks: Best Web Domain and Best Game Design	2019
٠	oSTEM National Conference Hackathon: 1st Place	2020 •	BPA: Java Programming State Qualifier	2016, 2017
٠	Palo Alto Networks internal hackathon: 2 nd Place	2020 •	CodeDay Dallas Hackathon: 1st Place Overall	2016
٠	IEEE AI Hacks: First Place Winner	2019 •	IBM Master the Mainframe: Level One Winner	2016, 2017

Jan 2020 - Mar 2020

Feb 2019 - Jun 2019

Jan 2020 - Mar 2020

Feb 2019 - Apr 2021

Feb 2018 - Sep 2018

Mar 2021 - Jun 2021

Feb 2021 - Mar 2021

Aug 2019 - Dec 2019

Jun 2019 - Aug 2019