



Simeon Tran

COMPUTER SCIENCE GRADUATE STUDENT

Santa Cruz, CA

simeonat.github.io | [SimeonAT](#) | [simeon-tran](#)

Education

University of California, Santa Cruz

M.S. IN COMPUTER SCIENCE AND ENGINEERING

[Santa Cruz, California](#)

Sept. 2023 - PRESENT

University of California, Santa Cruz

B.S. IN COMPUTER SCIENCE AND ENGINEERING

[Santa Cruz, California](#)

July. 2019 - June. 2023

Master's Thesis

OpenThread ASCON Fork for ESP32 Devices

[HTTPS://GITHUB.COM/UCSC-THREADASCON](https://github.com/UCSC-THREADASCON)

[Jan. 2024 - Present](#)

- Removed encryption algorithm used in OpenThread (AES) and replaced it with the ASCON encryption algorithms
- Forked and modified ESP-IDF source code to allow 802.15.4 compatible ESP32 devices to run my modified OpenThread ASCON fork

Experience

Tech4Good Lab

LEAD RESEARCH ASSISTANT

[Santa Cruz, California](#)

[Jun. 2023 - Dec. 2023](#)

- Oversaw the development of an Express.js and OpenAPI server that used ChatGPT to create personalized learning curriculums
- Helped team members write unit tests to help check the functionality of the backend server
- Conducted in-house research studies on explore how ChatGPT can be used to automate the creation of personalized learning pathways
- Developed the initial UI/UX flowchart for a web application used to design personalized learning experiences

Tech4Good Lab

WEB DEVELOPER TEAM LEAD

[Santa Cruz, California](#)

[Apr. 2023 - Jun. 2023](#)

- Used Ionic and Capacitor to create infrastructure to allow all existing Angular projects to run as iOS and Android apps
- Implemented Google OAuth login on iOS and Android using the Codetrax Capacitor Plugin
- Wrote detailed documentation and onboarding instructions for new members to get them acquainted with Ionic

Pharaoh Construction

INFORMATION TECHNOLOGY INTERN

[Los Angeles, California](#)

[Jun. 2022 - Sept. 2022](#)

- Responsible for day-to-day management of company's Synology NAS, including doing weekly backups and transferring important files onto server
- Managed Tailscale VPN that allows all employees to remotely access NAS and printers located in main office
- Used Docker to self-host Vaultwarden password manager on NAS in order to securely store employee passwords
- Used React and Node.js to develop a simple web application to allow employees to utilize Git version control without any knowledge of version control

Skills

Embedded Systems	ESP-IDF, OpenThread
Back-end	OpenAPI, GraphQL, PostgreSQL, Docker, Firebase
Front-end	React, Angular, HTML5, CSS
Programming	C/C++, Python, Typescript/Javascript, Haskell
Soft Skills	Tutoring, Mentoring