Simeon **Tran**

COMPUTER SCIENCE GRADUATE STUDENT

Santa Cruz, CA

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Education

University of California, Santa Cruz *Santa Cruz, California*
M.S. IN COMPUTER SCIENCE AND ENGINEERING *Sept. 2023 - PRESENT*

University of California, Santa Cruz *Santa Cruz, California*
B.S. IN COMPUTER SCIENCE AND ENGINEERING *Jul. 2019 - Jun. 2023*

Master's Thesis

OpenThread ASCON Fork for ESP32 Devices
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 *Santa Cruz, California*
LEAD RESEARCH ASSISTANT *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 *Santa Cruz, California*
WEB DEVELOPER TEAM LEAD *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 Codetrix Capacitor Plugin
- Wrote detailed documentation and onboarding instructions for new members to get them acquainted with Ionic

Pharaoh Construction *Los Angeles, California*
INFORMATION TECHNOLOGY INTERN *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