

Tuyet Hoa (Jenny) Quach

628-225-5677 | hoatuyet423@gmail.com | [linkedin.com/jennyquach11](https://www.linkedin.com/jennyquach11) | github.com/hoatuyet423

EDUCATION

University of California, San Diego

La Jolla, CA

Bachelor of Science in Mathematics and Computer Science (GPA: 3.4)

Sept. 2021 – June 2024

- **Coursework:** Data Structures, Software Tools, System Programming, Graph Theory, Theory Computation, Software Engineering (in progress), Algorithms (in progress)
- **Certificate:** CodePath iOS development, CodePath Web Development (in progress), Udemy SQL (in progress)

EXPERIENCE

Software Vice Lead - Robocup

Sept. 2022 – Present

- Working in a team of 20+ members to build a team of 6 robots to play soccer and hosting technical workshops
- Computing TritonBot run on the **Raspberry Pi** of each robot, which act as **UDP** server that receives decisions from TritonSoccerAI client, then transmitting the processed commands to embedded system through **UART**
- Computing TritonSoccerAI which decide the action of each robot based on a Behavior Tree Skill System

UCSD CSE Department Tutor

Jan. 2023 – Present

- Working as an instructional assistant for **Data Structure** courses of more than **600 students**, assisting over **50** students in one-on-one teaching and debugging with programming assignment, with 100% good feedback

PROJECTS

UCSD Food Review - CodePath | Xcode, Swift, Storyboard, Figma, Parse

[github](#)

- Worked in a team of 4 developers on the development of an iOS application allowing UCSD students to publish reviews and rate different dining halls available on campus using **Xcode** and **Swift**
- Designed a prototype user's view by using **Figma** and built the storyboard that allowing users to switch to different dining halls and restaurants view controllers
- Used **Parse** as a database to store user accounts, allowing users to manage their information and reviews

Human Detection – IEEE Quarterly Projects | Arduino, C++

[documentation](#)

- Worked in a team of 3 to create a wearable device using **C++** in **Arduino** that can detect any human being in range of 6-9 feet by lighting up a LED light to reduce COVID exposure
- Utilized a thermal sensor to detect humans by comparing the temperature changes in the environment
- Achieved the best performance project out of 11 teams in Quarterly Project hosted by IEEE

Twitter Clone - CodePath | Swift, Xcode, APIs, Alamofire, CocoaPods

[github](#)

- Developed a clone of Twitter using **Swift** and **Xcode** by requesting tokens from Twitter APIs
- Extracted Tweets from Twitter APIs and generated the profile images using **Alomofire** and **CocoaPods**

POP - Missfits (All girls Robotics Team) | Python, GUI, Tkinter, ESP32, MQTT

- Implemented a **GUI** using **Tkinter framework** and **Python**, that stimulated an interactive game that encouraged at home exercise during the pandemic and became one of the 20 finalists for the FIRST Global Innovation Awards
- Established the connection between each **ESP32** microcontroller by using network protocol **MQTT**

ACTIVITIES AND LEADERSHIP

Mentor - EDGE (Empowerment and Development for Girls in Engineering)

Sept. 2022 – Present

- Providing advice in CS for K8-12 students in San Diego area and guiding them through their college application.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, Swift, LaTeX

Tools: Git, JUnit, VS Code, Xcode, Figma, Alomafire, CocoaPods, Tkinter, MQTT, RabbitMQ, Arduino, ESP32, Linux/Unix, Pi cluster