Kyle **Wade**

☐ +1 (949) 887-7545 | ✉ kwade@ucsd.edu | ⌨ kyle1373 | in kylewade1373

Education

University of California, San Diego   *San Diego, CA*

B.S. IN COMPUTER ENGINEERING   *Sept 2020 - June 2024*

- **3.9 GPA**. Member of Honor Societies **Tau Beta Pi (TBP)** and **IEEE - Eta Kappa Nu (HKN)**.

Work Experience

UC San Diego Computer Science and Engineering Department   *San Diego, CA*

INSTRUCTIONAL ASSISTANT   *Sept 2021 - Present*

- Helped **360+ students** by grading exams, giving constructive feedback with programming assignments, and holding tutoring sessions outside of normal class time in a Data Structures and Algorithms class.
- Taught and reviewed concepts such as **binary search trees**, **linked lists**, **stacks**, **heaps**, **priority queues**, and **hashmaps**.
- Received **100% student approval** rating across **120+ one-on-one sessions.**

Qualcomm   *San Diego, CA*

SOFTWARE ENGINEER INTERN   *June 2022 - Sept 2022*

- Worked with **8 customers** to develop **2 tools** in **Python**, **C#**, and **XAML** which fully implement and demonstrate **5 new Qualcomm Snapdragon features**.
- Created a camera tool which renders and displays all of a computer's cameras onto one screen simultaneously while designing novel facial detection and wide dynamic range post-processing algorithms to showcase Snapdragon CPU capabilities, **boosting customer satisfaction across multiple clients**.
- Enhanced a CPU thermal stress-testing tool by optimizing multithreading and automating tasks through scripting, **increasing product efficiency by 50%**.

Navlabs   *Laguna Niguel, CA*

SOFTWARE ENGINEER INTERN   *June 2021 - Sept 2021*

- Developed a **C++** executable that scans binary code from GPS simulators and converts it into data readable to other systems.
- Resulted in **200% increased productivity** from company simulators. Executable currently used by company to parse GPS data.

Leadership & Activities

IEEE - Eta Kappa Nu (HKN)   *San Diego, CA*

SOFTWARE DEVELOPER LEAD — GITHUB   *May 2021 - Present*

- Led a team of **6 software engineers** on the development of a member portal used by **400+ HKN honor society members** at UC San Diego.
- Developed a stateful **React.js** frontend displaying a role-specific website where officers can create events for members and inductees on a calendar.
- Designed a scalable **PostgreSQL relational database** holding event and member data while utilizing **REST API** for entity endpoints.
- Created an authentication flow using **Firebase** to store session tokens on the client, enabling exclusive member sign-in.

IEEE - Eta Kappa Nu (HKN)   *San Diego, CA*

EXECUTIVE BOARD OFFICER — WEBSITE   *May 2021 - Present*

- Organized and ran hackathons, ceremonies, and industry recruiting events for **hundreds of university students**.
- Streamlined new students inducting into the engineering honor society through conducting technical interviews.

FIRST Robotics Competition - Team 5199   *San Juan Capistrano, CA*

TEAM ENGINEER   *Sept 2017 - June 2020*

- Learned and used **Python** and **C++** through constructing a yearly team robot in a fast-paced environment. Achieved **1st out of 56 teams** in the 2019 Los Angeles Regionals and **1st out of 42 teams** in the 2019 Ventura Regionals. Competed in the **World Championships** in 2019.

Projects

Moment

UNIVERSITY EVENTS MOBILE APP — WEBSITE / GITHUB

- Co-founded, developed, and marketed a **React Native mobile app** which scrapes social media data and parses them into events for students.
- Used the graph database management system **Neo4j** integrated in a **Go** backend to create an event recommendation system hosted with **AWS**.
- Beta has **700+ Android and iOS users**. Implemented new features based on feedback from **50+ user interviews** over **2 months**.

ForestShield

WILDFIRE PREVENTION WEB TOOL — HACKATHON PRESENTATION & DEMONSTRATION

- Collaborated with **6 developers** over **72 hours** to create an early wildfire detection tool which shows real-time low-latency wildfire risk in forests.
- Built an architecture which leverages **IoT sensors**, **5G**, **LoRaWAN**, **Python**, **React.js**, and **machine learning** to send incoming sensor data to a ML model trained by existing forestfire datasets, creating an inference on wildfire severity around deployed sensors to display as a heatmap on the frontend.
- **Achieved top 3 out of 150+ competitors** in QHack2022, Qualcomm's annual 5G hackathon for interns.

Technical Skills

Languages:	Java, C, C++, C#, JavaScript, Typescript, Go, Python, CSS, HTML, XML, XAML, Bash, PowerShell, Dart, SQL
DevOps:	Docker, Heroku, Netlify, Firebase, CircleCI, AWS
Frameworks:	GitHub, React, React Native, Express, Rest API, Node, PostgreSQL, Neo4j, Flutter, GDB/Valgrind, JUnit, Linux, TensorFlow, OpenCV
Techniques:	Agile Software Process, Behavior-Driven Development, Design Patterns, Software Engineering Principles