Kyle Wade

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EDUCATION

Computer Engineering, B.S., University of California, San Diego   **Expected Graduation: June 2024**
GPA: 3.9 / 4.0   La Jolla, CA
Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Linear Algebra, Multivariable Calculus

WORK EXPERIENCE

Data Structures and Algorithms Tutor   **Sept 2021 — Present**
UC San Diego Computer Science and Engineering Department   La Jolla, CA
- Help **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.
- Teach and review concepts such as **binary search trees**, **linked lists**, **stacks**, **heaps**, **hashtables**, and **hashmaps**.

Software Engineer Intern   **June 2021 — Sept 2021**
Navigation Laboratories   Laguna Niguel, CA
- Maintained **GPS simulator codebase** in languages such as **Pascal** and **C++**.
- Developed a **C++ executable** that takes in **binary code** from GPS systems and **converts the data** to make it readable to other systems.
- Resulted in **200% increased productivity** from company simulators. Executable currently used by company to parse GPS data.

LEADERSHIP & ACTIVITIES

Board Officer   **May 2021 — Present**
IEEE - Eta Kappa Nu (HKN) — Website   La Jolla, CA
- Organize and run **hackathons**, **ceremonies**, and **industry recruiting events** for hundreds of university students.
- Streamline new students inducting into the engineering honors society through **conducting technical interviews**.

Software Developer   **May 2021 — Present**
IEEE - Eta Kappa Nu (HKN) — GitHub   La Jolla, CA
- Improve and maintain organization-specific programs and websites, such as a member portal where HKN members can **sign in to HKN-specific events**, **log participation in HKN-specific events**, and **store their resumes**.
- HKN software run with **MongoDB**, **Express.js**, **React.js**, and **Netlify**.

Team Software Engineer   **Sept 2017 — June 2020**
FIRST Robotics Competition - Team 5199   San Juan Capistrano, CA
- Learned and used **Python**, **JavaScript**, **C**, **C++**, and **Java** through constructing a team robot every year in a fast-paced environment.
- Competed in FIRST Robotics Competition, a yearly international high school robotics competition where robots battle each other while accomplishing tasks such as scoring balls into goals, placing inner tubes onto racks, and balancing robots on balance beams.
- 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

Hobbies Inc.: Online Hobby Forum — Website / GitHub
- Collaborated with 5 other developers to build a website that matches users to different hobbies, giving them the opportunity to communicate with other like-minded people about their interests.
- Gained experience in **JavaScript**, **React.js**, **CSS**, **Netlify**, **Heroku**, **MongoDB**, and **Rest API**.
- Showcased in front of the Association for Computing Machinery at the University of California, San Diego in front of **50+ spectators**.

Synthful: Piano Transcription Mobile App
- Developed an Android mobile application that allows the user to play their piano piece into their device's microphone, in which the app converts the audio into digital sheet music.
- Learned how to use a **Fast Fourier Transform** to map the notes on a frequency versus time graph, even when multiple notes are played simultaneously.
- Created the app in Android Studio using front-end **XML code** and back-end **Java** code.

TECHNICAL SKILLS

Languages: Java, C, C++, CSS, HTML, XML, Bash, PowerShell, Pascal, Python, JavaScript
DevOps: Docker, Heroku, Netlify, MongoDB
Tools/Frameworks: Linux, Git, GDB/Valgrind, JUnit, Makefiles, React.js, Express.js, Rest API