

Kyle He

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EDUCATION

University of Southern California

B.S. in Computer Science — GPA: 3.85

Expected Graduation: May 2025

Honors: Presidential Half-Tuition 4-Year Scholarship, Dean's List

Relevant Coursework: Data Structures, Introduction to Programming with C++, Web Development, Discrete Math, Linear Algebra, Calculus II

EXPERIENCE

Software Engineer / Cohort Member - USC Makers

September 2022 - Present

- Building robotic laser pointer that automatically locates and points at constellations in the night sky with 6 other students; currently in progress.
- Developed a front-end website in React.js; programmed a back-end in Python and MQTT.

Treasurer / Hardware Designer - FIRST Robotics Team 846

September 2018 - May 2021

- Built the electrical subsystem on the 2018 year robot; designed the robot intake on the 2019 year robot using Autodesk Inventor; raised \$10,000 in funding via grants.

PROJECTS

P2HB Discord Bot

Python, Discord.py, MongoDB

[Link to source code](#) / [Link to Top.GG](#)

- Built a chat-based game on Discord, **connecting 500,000 members and 12,000 active users online across 6,600 servers**
- Consisted of multiplayer tournaments, Pokémon trivia games, user role management and more.
- Written in Python on the Discord.py framework; managed the user database on MongoDB; deployed the application with PM2; **maintained an open-source codebase with 7,000 lines of code.**

Unus Motus Game

C#, Unity

[Link to Demo](#) / [Link to source code](#)

- Created a turn-based puzzle game with C# on the Unity game engine; wrote a MongoDB database wrapper with Elixir; competed in FBLA, earning 1st place statewide and 10th nationally.

FoodMatch

Typescript, React, TailwindCSS, Python, ConvexDB

[Link to Demo](#) / [Link to Devpost](#)

- Created a full-stack website with user login, friend management, and a cuisine ranking system in the span of 36 hours for TreeHacks @ Stanford.
- Scraped food data using Python; built a front-end with ReactJS with TypeScript and Tailwind.

Fake News Chrome Extension

JavaScript, Vue, Python, HTML/CSS, Flask

[Link to source code](#)

- Created a Google Chrome extension and full-stack website that parsed website data and displayed potential news bias and a trustworthiness index
- Built an API with Python using Flask; trained a machine learning model using TensorFlow; programmed the website with Vue.

SKILLS

Languages: Python, Java, C++, C#, Javascript (Most to least proficient)

Technical Skills: Git, React.JS, Vue.JS, MongoDB, SQL, AWS, Unity, Discord.py, HTML/CSS, \LaTeX

Software: Photoshop, Final Cut Pro, After Effects, Autodesk Inventor