Chase Peterson

San Diego, California

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(760) 639-9930

UC San Diego

Education

Bachelor of Science in Computer Science Bachelor of Arts in Music with an Emphasis in Technology September 2020 - June 2025 San Diego, California GPA: 3.90/4.00

Technical Skills

Languages Java, Python, HTML/CSS, JavaScript, TypeScript, C, C#, C++, SQL, R, MATLAB

Technologies/Frameworks React, React Native, Next.js, Node.js, Express.js, MongoDB, Firebase, AWS, WordPress, Godot

Developer Tools Git/GitHub, Figma, Unix, VS Code, Eclipse, Vim, TailwindCSS, Vercel, Expo

Experience

Origin Golf Software Engineering Intern

June 2022 - August 2024 Vista, California

• Independently developed and launched full-stack machine shop organization and order management websites:

- Created a MySQL database for both tools to maintain up-to-date information about the machine shop and company, as well
 as a complete history of all jobs and orders, interfacing with the front-end using Node.js.
- Developed the front-end interfaces with Next.js (built on React.js) with a responsive UI designed in Figma. Created filterable history pages based on company feedback to view the full history of both tools, enabling user errors to be easily reversed.
- o Increased workload awareness and organization by an estimated 80%, leading to more dynamic workforce management to scale with the needs of the company and virtually eliminating the issue of overstaffing.
- Created several additional tools and websites to increase efficiency:
 - o Developed a <u>time-clock management tool</u> to decrease payroll entry time by an estimated 30%.
 - Built a <u>conversion tool</u>, once in Java for desktop users, and again in React for web users, to optimize manufacturing time.
 One of the tool's many settings improved machine time by 3 hours per 1000 parts.

TritonThenix Software Engineering Intern

July 2024 - Present UC San Diego

- Developed 50% of the project's major front-end components in React Native with a emphasis on creating highly customizable and reusable components for covering more use cases and saving future development time.
- Led the integration of Firebase into the application, connecting the frontend application to a Google Firestore database.

Leadership Opportunities

Technology Director for Video Game Development Club

September 2023 - Present

- Designed and developed a <u>new club website</u> with accessible event and news integration. Developed the events system using the Google Sheets API, allowing our events team to easily update its information without technical skills.
- Served concurrently as treasurer, overhauling the club's financial systems and records to manage our \$3200 annual budget, and working closely with the events coordinator and executive team to plan and finance all club projects, activities, and events.

Computer Science Mentor

September 2023 - June 2024

- Served as mentor to four computer science students at UCSD in the Mentor Collective program. Coordinated individual meetings tailored to each mentee's needs, including preparing lessons, resources, and answers to questions.
- Regularly tutored two students in LeetCode, landing them both summer internships.

Projects

Game Jam Entries

- Designed and developed a variety of video games, including several for the bi-annual Ludum Dare game jams.
- Created a <u>custom 2D game engine</u> built in Java as the base, updating it and adding new features after every game jam.

Custom CPU

• Built a <u>custom CPU</u> in CSE 141L using SystemVerilog and a code assembler using Python to translate a custom-designed assembly language to machine code. Finished first in the class, achieving a perfect grade.

Coursework

Machine Learning Computer Vision Computer Architecture Cybersecurity Operating Systems

Awards

Salutatorian at Classical Academy High School National Merit Commended Scholar Provost Honors (Every Quarter Enrolled at UCSD)