John Zhou

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✦ Education

University of California San Diego
La Jolla, CA
Sept 2020 - June 2025

BS in Mathematics - Computer Science & Minor in Engineering Mechanics
- Provost Honors
- **Courses:** Data Structures and Algorithms, Object-Oriented Programming, Systems Programming, Design and Analysis of Algorithms, Discrete Math & Graph Theory, Mathematical Reasoning, Numerical Analysis: Linear Algebra, Statistical Theory and Methods, Engineering Graphics, Solid/Fluid Mechanics

✦ Experience

Meetomate
Remote
July 2024 - Sept 2024

Software Engineer Intern
- Collaborating with a team of 4 developers using Agile methodologies to design and develop an MVP with 98% feature completion within the span of the internship.
- Improved core app functionalities during user testing; including user posting and user to user interaction, which increased user retention by 41%.
- **Technical Skills:** React Native, Expo, Tailwind, Typescript, Figma, MongoDB

Lockheed Martin Multiple UAVs for Search and Rescue
Pomona, CA
Sept 2023 - Dec 2023

Software Engineer Intern
- Used Python to build XBee radio modules system for communication between various drones, encoding position and sensory data into smaller data structures for faster wireless messaging, which improved separation range by 2-3 miles as well as improved transmission speeds and connectivity between drones.
- Cooperated in a computer vision project focused on integrating object detection and depth-mapping using stereo cameras with OpenCV and YOLOv8 to better avoid obstacles.
- **Technical Skills:** Python, OpenCV, YOLOv8, XBee, XCTU

Triton Engineering Student Council
La Jolla, CA
Aug 2021 - Aug 2023

Technical Lead
- Led the revamping/updating of 2 major websites for engineering events (TESC Events and Engineering on the Green) using mostly React and JavaScript, connecting upwards of 1,500 students to campus engineering organizations in the first quarter.
- Worked closely with small team to revive SD Hacks and the Disciplines of Engineering Career Fair post-quarantine, providing roughly 2,000 students with career opportunities upon revival.
- **Technical Skills:** React.js, JavaScript, Sass, Node.js, HTML/CSS, Git Version Control

Tyfast Energy
La Jolla, CA
Jul 2022 - Jul 2023

Battery Engineering Intern
- Conducted anode composition experiments, optimizing load times and capacity of coin/pouch batteries.
- Performed quality control through preparing and casting slurry, ensuring ideal performance per batch.
- Produced a coin cell that survived 7,000 charging cycles with negligible decay, likely still cycling today.
- **Technical Skills:** Battery Assembly, Quality Control, Laboratory Research, Glove Box Usage, Excel

✦ Projects

John's Supersite
Personal
Feb 2023 - Present

Big-Time Outlandish Mind-Melting Bread-Winning Developer
- Developing a personal showcase and expressional website with React and Vite, programmed in JavaScript, and HTML/CSS to better my skills and showcase my hobbies.
- Practicing new skills and concepts like integrating web APIs and 3D graphics with Three.js.
- **Technical Skills:** React.js, Vite.js, Three.js, JavaScript, HTML/CSS, WebAPIs

Feynmind
UCSD DiamondHacks
Apr 2024

Developer
- Designed a web app for enhancing educational experiences through guided Feynman technique studying.
- Programmed in React with JavaScript, and HTML/CSS, with use of OpenAI's LLM model within 2 days.
- Received "Best Duo Hack" out of roughly 300 participants for UCSD ACM Diamond Hacks 2024.
- **Technical Skills:** React.js, JavaScript, HTML/CSS, OpenAI LLM, WebAPIs

✦ Skills

Technical	Java, JavaScript, Python, TypeScript, HTML/CSS, C, C#, C++
Frameworks	React.js, React Native, Expo, Vite.js, Three.js, Tailwind, MongoDB, Firebase
Tools	Github, Git, Shell, Figma, Procreate, Clip Studio, Illustration, CAD, MATLAB, Microsoft Office