Jessica(Jiaxin) He

San Diego, CA | (858) 305-0274 | jih063@ucsd.edu | Linkedin

EDUCATION

Carnegie Mellon University *-Master of Software Engineering* Sep 2025 - Jan 2027(expected)

University of California, San Diego *-B.S. in Computer Science - Maths, minor in Data Science* June 2025

GPA: 3.60/4.0, Provost Honors

Coursework: Data Structures & Algorithms, Operating System, System Design, Computer Networks, Computer Security, Computer Architecture, Compiler Construction, Machine Learning, Systems Programming, Big Data, Analytic Geometry, Data Visualization

TECHNICAL SKILLS

Programming | Python, Java, C++, C, HTML, CSS, Golang, SQL, Javascript, R, Matlab
Frameworks/Cloud-Platforms | React.js, Next.js, Express.js, Node.js, AWS, PyTorch, MongoDB, PostgreSQL
Tools and Methodologies | Linux, Git, CI/CD, APIs, Docker, Agile, Test-Driven Development
Soft Skills | Project Leading, Decision making, Problem-Solving, Communication, Multi-tasking

WORKING EXPERIENCE

San Diego Supercomputer Center Jun 2024 - present

Software Engineer Development Intern

- Served as the team's code administrator, overseeing version control and leading backend team operations. Spearheaded backend development for an innovative online study room platform using **JavaScript**, **React**, **MongoDB**, and **REST APIs**.
- Independently developed and configured the IP address for a website, utilizing a **virtual machine** and **PM2** for robust process management, ensuring direct IP accessibility for seamless user connections.

Tesla, Inc Aug 2023 - Sep 2023

Software Engineer Development Intern

- Independently implemented multiple customized project tracking tools using **Node.js** and **MySQL** for electrical car manufacturing. Integrated Gantt charts and logs. Contributed to a noteworthy 15% increase in departmental efficiency.
- Developed an automated weather notification app that read data from third party **API**s and automatically sent out tailored email notifications to 6+ onsite team whose schedule and work depends upon in time weather info, helped teams with the decision making.
- Utilized **CUDA C++** for parallel programming to optimize computational tasks, enhancing the performance and efficiency of real-time data processing applications. Specifically, implemented parallel algorithms to accelerate data processing by splitting tasks across multiple GPU cores, reducing processing time by up to 50%.

Huaqin Technology Co., Ltd. June 2023 - July 2023

Software Engineer Development Intern

- Contributed to the development and implementation of high-quality software products. Wrote and deployed over 500 automation test cases in **Python**, covered essential functionalities, the automation testing pipeline identified 200+ issues.
- Conducted daily **smoke tests**, leveraging **command line tools** and **log** collection to efficiently monitor software quality and prevent critical failures in daily releases.

PROJECTS

On-Campus Ride-Sharing App April 2022 - present

Full stack developer

- Led the design and implementation of a campus-wide ride-sharing platform that integrates real-time mapping and user authentication features using **HTML**, **CSS**, **JavaScript**, and **React**, enhancing mobility for 100+ students.
- Developed backend APIs using **Node.js**, **Express** and **MySQL** database, designed and implemented data schemas of core entities and API authentication to achieve low latency and high security.

Data Analysis and Prediction Competition Jan 2022 - Aug 2022

Student researcher

- Successfully executed the analytical methodology, resulting in a robust 78% prediction accuracy rate. Highlighted the potential of data-driven insights in entertainment forecasting and established a foundation for future predictive endeavors.