

Howard Wei

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EDUCATION

San Jose State University

San Jose, CA

GPA: 3.70, B.S. in Computer Science

May 2027

Relevant Coursework: Data Structures and Algorithms, Linear Algebra, Differential Equations, Operating Systems

EXPERIENCE

Cytokinetics

South San Francisco, CA

AI Data Scientist Intern

May 2025 – Aug 2025

- Pioneered a visualization platform that processes user requests for **1M+** data points by developing a sophisticated **AWS Bedrock** LLM agent with **Python**-based **Lambda** functions for real-time database integration.
- Developed AI-powered data solutions that automated data processing tasks from **PostgreSQL**, resulting in **70%** adoption rate among researchers and **84%** reduction in visualization creation time.
- Implemented user-friendly, natural language interfaces using **Vue**, enabling **100+** scientists to generate complex visualizations without coding knowledge, resulting in **85%** increase in data analysis frequency.

Google Developer Group

Merced, CA

Lead Machine Learning Engineer

Sept 2024 – Dec 2024

- Built and deployed a paper trading platform for analyzing trading habits and providing retail investors with insights through **AWS** (EC2, RDS, Lambda).
- Recruited and led the Machine Learning Team of **25** student developers from **5** universities, using **Agile** methodologies (Kanban), **GitHub Pro**, and **Jira** to ensure collaboration and task management.
- Improved platform responsiveness by **35%** and scaled to support growing user demand by building a **Django REST** API with Alpaca Markets, integrating real-time and historical data into **MySQL**.
- Utilized the applications of **OpenAI GPT-4o** and **Groq** APIs on **7** different metrics of financial advice.

Machine Learning at SJSU

San Jose, CA

Full Stack Developer

Sept 2024 – Present

- Developed **5** API endpoints to save and fetch user posts and readings in a **PostgreSQL** cloud database.
- Designed and implemented frontend user interface with **React** and **Tailwind CSS**, fetching data from API endpoints using **SWR**.
- Collaborated with the development team using **Git** workflows and **GitHub** for project management, implementing best practices for code reviews and feature branching.

PROJECTS

EmotionAI

April 2024

- Led a team of **5** student engineers across **4** universities nationwide in developing a human emotion detection model using OpenCV to process **over 35,000** images of facial expressions.
- Trained and tested a **5-layer** custom Sequential neural network using **Python** and **PyTorch**.
- Achieved **over 60%** accuracy for **7** unique facial expressions through webcam deployment on **Streamlit**.

ByTech

August 2023

- Online classroom for programming teachers to publish programming problems and create test cases.
- Utilized **Firebase** to organize and store accounts, classes, and assignments.
- Compiles **Python** into **WASM** with **Pyodide** to be run in browsers.
- Built frontend with **Next.js**, **React**, and **Tailwind CSS** for a responsive and seamless user experience.
- Leveraged **Agile** methodology (Scrums), ensuring iterative improvements and regular feedback integration.

TECHNICAL SKILLS

Languages: Python, Typescript, Javascript, Java, C/C++, MATLAB, SAS, SQL, HTML/CSS, WASM

Frameworks: LangChain, PyTorch, Django, Django REST, Next.js, React, Nuxt.js, Vue.js, Tailwind CSS

Developer Tools: AWS, GCP, Azure, Git, Jira, Agile, PostgreSQL, MySQL, Docker, Firebase, Streamlit, Vercel

Libraries: OpenCV, Keras, Matplotlib, Seaborn, NumPy, Pandas, Scikit, Pyodide, SWR