Howard Wei

howardwei21@gmail.com ❖ hwei.vercel.app ❖ linkedin.com/in/weihoward ❖ github.com/HowardWei123

EDUCATION

San Jose State University   San Jose, CA
GPA: **3.83**, B.S. Computer Science   *May 2026*
Relevant Coursework: Data Structures & Algorithms, Linear Algebra, Discrete Math, Object Oriented Design

TECHNICAL SKILLS

Languages: Typescript, Javascript, Python, Java, C++, SQL, HTML/CSS, WASM
Frameworks: Tensorflow, Django, Django REST, Vue.js, Next.js, React.js, Tailwind CSS
Libraries: Matplotlib, Seaborn, NumPy, Pandas, Scikit, OpenCV, Keras, Pyodide, SWR
Dev Tools: AWS, Git, Jira, Google Colab, Jupyter, VSCode, Eclipse, Vercel, Firebase

EXPERIENCE

Google Developer Group, UC Merced   *September 2024 - Present*
Lead Machine Learning Engineer
- Built a paper trading platform for analyzing trading habits and providing retail investors with insights.
- Recruited and led a team of **25 students** across **5** universities using **Agile** methodologies (Kanban).
- Utilized **Github Pro**, **Jira**, and **frequent standups** for proper task management, version control, progress tracking, and smooth collaboration across **3** cross-functional teams (Quantitative Analysis, Machine Learning, and Full Stack).
- Integrated real-time and historical market data using **Alpaca Markets** REST API.
- Researched the applications of **OpenAI GPT-4o** and **Groq** APIs on financial advice.

Machine Learning at SJSU   *September 2024 - Present*
Web Developer
- Integrated dynamic data fetching and caching for real-time updates on event schedules and blog posts using **SWR**.
- Designed and implemented frontend with **React.js** and **Tailwind CSS**, creating a responsive and user-friendly interface for club members to share insights and updates.
- Collaborated with the development team using **Git** for version control and **GitHub** for project management, implementing best practices for code reviews and feature branching.

Spartan Gaming   *February 2024 - Present*
Software Engineer / Event Coordinator
- Used **Vue.js** and **Typescript** to build a dynamic, mobile-friendly club website from scratch.
- Hosted weekly online gaming events for **over 3,000** SJSU and non-SJSU **club members**.
- Organized and facilitated tournaments for **~10 teams** with several cash and physical prizes.
- Co-hosted fundraisers to raise money for club and charity partners.

PROJECTS

EmotionAI   *April 2024*
- Led a team of **5 students** across **4** universities nationwide in the development of a human emotion detection model using **~35,000** images of facial expressions.
- Utilized **OpenCV** video capture to recognize and process multiple objects in images.
- Trained on **Tensorflow** Sequential model to create and fine-tune a **5-layer** neural network for optimal training.
- Achieved **60%+** testing accuracy for **7** total facial expressions (common and uncommon).

ByTech   *August 2023*
- Online classroom for programming teachers to publish programming problems and create test cases.
- Utilized Google **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.

AWARDS & CERTIFICATIONS

GIAC Foundational Cybersecurity Technologies (GFACT)   *June 2024*
National Cyber Scholar   *February 2024*