Johnson Hsiung

GitHub | Personal Site | LinkedIn

EDUCATION

San Jose State University Aug 2018 – May 2022
Cumulative GPA of 3.87/4.00
B.S. Computer Science

EXPERIENCE

Outlier May 2024 – August 2024
AI Coding Trainer/Reviewer
- Enhanced and annotated AI Python responses across 5 complex projects, adapting to evolving requirements.
- Promoted to Reviewer within two months for consistently delivering high-quality code, maintaining a **4.5/5** average rating for code accuracy, clarity, and functionality.

Gridware Dec 2023 – Present
Data Analyst
- Analyzed real-time grid data to identify potential faults, wildfires, and other hazards, improving overall grid safety.
- Conducted mentoring, training, showing, and reverse-shadowing sessions with new analysts to enhance team efficiency.
- Increased product metrics accuracy **by 30%** through Python, data science techniques, and close collaboration with customer representative to better align data analysis with client needs.
- Tested wildfire simulation software to lay the groundwork for quantifying product impact on reducing wildfire costs.

Stanford Linear Accelerator Center (SLAC) Jun 2021 – Aug 2022
Software Engineer Intern
Electrical Grid Tariff Simulation | Data cleaner
- Utilized GridLAB-D electric grid simulation API with Python and MatplotLib in Docker environment to simulate and visualize California electrical tariff charges across grid networks.
- Automated usage of electrical tariff simulation through shell script, **reducing setup time by 80%.**
- Developed a robust data cleaning pipeline in Python and Pandas, streamlining the utility pole simulation process.
- Identified and resolved three critical bugs in GridLAB-D, contributing to immediate fixes and improved stability.
- Presented technical findings to an audience of 50 and authored a research paper submitted to the Department of Energy.

SJSU College of Science Jan 2020 – May 2022
Java and Data Structures Lab Instructor
- Led and instructed classes of 30+ students on object-oriented programming, data structures, and lab assignments.
- Designed comprehensive assessments and offered personalized feedback that resulted in significant grade improvements.
- Achieved **100% positive student feedback** on preparation and clarity, demonstrating a high level of teaching efficacy.

PROJECTS

FlashBrain | Repository Jul 2024 – Present
React.js, Next.js, Material UI, Stripe, OpenAI, Clerk, Vercel, Firebase Firestore
- Built a flashcard generator website, allowing users to easily generate, save, and manage flashcards tailored to any subject.
- Integrated **Clerk** for seamless user authentication, **Stripe** for secure payments, and **OpenAI** for flashcard creation.
- Engineered a responsive interface with **Next.js and React.js with Material UI**, ensuring a smooth user experience.
- Leveraged **Firebase Firestore** for scalable data storage and **Vercel** for hosting and CI/CD integration.

VolCoach.ai | Repository Jul 2024 – Present
React.js, Next.js, Material UI, Node.js, OpenAI, RAG, Vercel, Google API
- Designed and launched an AI powered vocal coach with 2 team members that provides personalized feedback and tailored exercises for aspiring singers.
- Implemented a **Retrieval-Augmented Generation (RAG)** pipeline, leveraging OpenAI's API and Google API to retrieve the top five most relevant YouTube videos for custom vocal exercises.
- Built a user-friendly interface using **Next.js**, **React.js**, and **Material UI** with **Vercel** for hosting.

SKILLS

Languages: Java, Python, HTML, CSS, JavaScript, SQL, C, C++, GraphQL
Technologies/Tools: React.js, Next.js, Node.js, OpenAI, AWS, Git, Docker, Postman, Firebase, Vercel
Methodologies: Agile Development, Object-Oriented Design, MVC Framework, RAG