Kevin Wong

Software Engineer
kevinwong973@gmail.com | (925)250-8871
LinkedIn | Github

Summary

Computer Science Major and Software Engineer passionate about scalable full-stack and AI-driven solutions. Currently interning at Up Cancer, rebuilding and modernizing a CRM (AWS, React, Express) to fund cancer patient support programs. Skilled in AI integration, translating UI/UX prototypes into functional code, and optimizing backend systems for efficiency. Focused on writing clean, mission-driven software and leveraging AI to enhance automation, data insights, and user experiences.

Education

California State Polytechnic University of Pomona Aug. 2021 - May 2025
Computer Science, Bachelor of Science *GPA: 3.94*

Technical Skills

Languages: Javascript, HTML, CSS, SQL, Java, Python
Frameworks: React, Vue, Express, Next, Flask
Developer Tools: Git, Postman, MongoDB, Amazon Web Services, Docker, Hugging Face, MySQL Workbench, WSL/Ubuntu, Maven/Gradle
Coursework: Software Engineering, Data Structures and Algorithms, Big Data Analytics and Cloud Computing, Operating Systems, Computer Architecture, Object-Oriented Programming, Database Systems

Experience

Full Stack Software Engineer Intern Jan. 2025 - Present
Up Cancer *Remote*

- Analyzing and refactoring existing CRM codebase (GitHub) to identify bottlenecks, improve scalability, and prepare for migration to AWS (EC2, Lambda, DynamoDB).
- Designing architecture for AWS deployment, including serverless components and DynamoDB integration to improve API response times.
- Partnering with frontend designers to implement UI/UX designs (Figma) into functional components, ensuring seamless integration with backend.
- Documenting technical processes and codebase improvements to streamline knowledge transfer for future interns and team members.

Full Stack Software Developer Aug. 2025 - Present
AI and Construction Technology Initiative *Pomona, CA*

- Created an AI-powered, desktop construction chatbot using Vue, Electron, and Ollama for multi-model processing, optimizing workflows across Precon, Con, and Postcon phases.
- Engineered a backend RESTful API for low-latency AI interactions, reducing response times by 20% and improving system throughput by 10%, enabling dynamic model switching based on project needs.
- Integrated gigabytes of real-world construction data from general contractors and firms to enhance AI model training, leveraging fine-tuning and image classification techniques for improved accuracy.
- Transitioning from open-source models to proprietary AI solutions tailored for construction, ensuring greater efficiency, adaptability, and predictive capabilities.
- Partnering with a multidisciplinary team to strategize and execute a scalable roadmap for transforming the chatbot into a market-ready application, leveraging guidance and sponsorship from Cal Poly Pomona Engineering Professors.

Ground Control Station Database Systems Engineer Aug. 2024 - Present
Northrop Grumman Collaboration Project *Pomona, California*

- Studying model-based systems engineering (MBSE) concepts such as requirements, measures of effectiveness, and key performance parameters, to achieve mission success.
- Collaborating with teammates to derive systems-level and vehicle-level requirements.
- Utilizing MBSE to address performance and design requirements as part of an existing Request for Proposal to ensure customer needs are met and satisfied.

- Facilitating communication between the Systems Engineering and GCS teams.

Predictive Analytics Developer Jun. 2024 - Aug. 2024

Clune Construction *San Francisco, California*

- Developed and implemented a model in Python to enable predictive financial insights and data-driven decision making within the company.
- Conducted thorough testing and debugging to ensure software quality and performance.
- Maintained strict confidentiality protocols, aligning with the company's compliance standards.
- Received commendation from Clune executive team for consistent model performance and contribution to financial analysis.

Information Technology Intern May 2024 – Aug. 2024

Center Theatre Group *Los Angeles, California*

- Designed and implemented a dynamic facilities map of IT resources using Visio and Excel, identifying different hardware and materials.
- Managed IT assets over the network using tools such as Visio, Microsoft, and ZenDesk.
- Created and configured virtual machines to support various IT projects, increasing workflow by 25% for remote employees.

Network Engineering Intern May 2023 – Aug. 2023

NIS Consulting *Concord, California*

- Gained insight into a Network Consultant and Network Engineer's daily operations, meetings, troubleshooting sessions, project updates, and the implementation of computer networks.
- Observed the steps of how to design, develop, adapt, and maintain a network infrastructure.
- Practiced networking with Cisco Packet Tracer: creating diagrams, configuring devices, troubleshooting, and performing network experiments.

Projects

PlanYourPlate | *JavaScript, HTML, Tailwind, React, Express, MongoDB, OpenAI* Sep. 2024 - Present

- Built and deployed PlanYourPlate, an AI-powered meal planning app that delivers personalized meal plans tailored to user preferences, with seamless functionality across devices hosted on Render.
- Integrated OpenAI's GPT API with advanced prompt engineering techniques to optimize meal plan generation and enhance user experience with accurate and relevant outputs.
- Implemented features like dark/light theme toggling, detailed meal cost breakdowns, and robust error handling to improve usability and engagement.

E-Commerce Platform | *JavaScript, HTML, Tailwind CSS, Next.js, MongoDB, Stripe* Sep. 2024 - Present

- Developed a full-stack e-commerce platform using Next.js, MongoDB, and Tailwind CSS to create a responsive and scalable online shopping experience.
- Implemented secure Stripe-based checkout for reliable payment processing and integrated MongoDB to manage dynamic product listings, user accounts, and inventory.
- Optimized performance with a modular code structure to support scalability and maintainability for future feature expansions.

Facial Expression Classifier | *Python, Jupyter Lab, Anaconda, PyTorch, Matplotlib, NumPy* Jul. 2024

- Created a Convolutional Deep Neural Network machine learning model for facial expression classification.
- Attained 1st Place on Kaggle Leaderboard with an above-baseline accuracy score of 0.82244.
- Applied accuracy-enhancing techniques such as image pooling, dropout, normalization, gradient clipping, and transforms, improving accuracy score by 13.15%

Medical Chatbot | *Python, Flask, JavaScript, HTML, CSS, Open AI and Spotify APIs* Apr. 2024

- Developed a full-stack web application to provide users with instant assistance for medical inquiries.
- Utilized Flask, OpenAI, and Spotify's API for the back-end and implemented HTML, JavaScript, and CSS for the front-end.
- Delivered immediate access to critical resources such as CPR guidelines, first aid information, and emergency hotlines, enhancing user accessibility to essential medical information.

Academic Achievements

President's Honor List

2022-2024

College of Science's Dean's List

Fall 2021-2024 | *Spring 2022-2024*