# **Kevin Wong**

Software Engineer

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# Summary

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

## **Education**

## California State Polytechnic University - 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, Computer

Networks, Operating Systems, Computer Architecture, Object-Oriented Programming, Database Systems

## **Experience**

Up Cancer

## **Full Stack Software Engineer Intern**

Jan. 2025 - Present

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

Pomona, CA

- Al-in-Construction Technology Initiative
  - Created an Al-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, 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

Pomona, California

Northrop Grumman Collaboration Project

- 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**

Clune Construction

Jun. 2024 - Aug. 2024

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.

## **Projects**

PlanYourPlate | JavaScript, HTML, Tailwind, React, Express, MongoDB, OpenAl

Sep. 2024 - Present

- Built and deployed PlanYourPlate, an Al-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 Al 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.

#### Certifications

AWS Cloud Practitioner (Mar. 2025)

# **Academic Achievements**

President's Honor List