

William Kim

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Porter Ranch, CA

Certifications

- Free Code Camp [Responsive Web Design Certificate](#) - Sept 2021
- Google Cloud Platform (GCP) [Professional Machine Learning Certificate](#) - May 2025

Soft Skills

Good Listener, Striving for Mutual Success, Eager to Learn

Languages

MySQL, PostgreSQL, Golang, Python, Bash, Swift, Kotlin, TypeScript

Application Tools

Android Studio, Gradle, XCode, Visual Studio Code, Git, Github, Figma, Google Firebase, Docker, Supabase, Linux

Experience

Software Developer Intern

Jun 2023 - Current

San Diego Supercomputer Center (SDSC)

- Performed database migrations for the [Alzheimer's Disease Research Center](#) web application.
 - Worked with dev leads to execute migrations from Microsoft AccessDB to a PostgreSQL database, using a pgadmin dashboard to validate consistency during data transfers.
 - Developed table **schemas** and **REST** API endpoints to retrieve clinical patient data.
- Implemented full-stack solutions for the [NeuroRes](#) mobile application used by UCSD Neurology residents.
 - Created API endpoints & web-sockets in **Golang** to facilitate real-time messaging between users.
 - Optimized **SQL** queries using practices such as indexing and deferred joins, improving loading times for complex paginated fetches on mobile devices.
 - Configured a **Linux** virtual machine with an Apache proxy to host a test server and database for experimentation.
 - Designed containerized Golang integration tests through **Docker**, enabling the team to validate and maintain code quality.
 - Configured **Gitlab** yaml files to generate versioned release artifacts in our **CI/CD** pipeline, which were used to update the production application.
 - Integrated a structured logging package throughout our backend application to help monitor and analyze program execution.
- Setting up and configuring a backend system for the [Institute for Genomic Medicine](#) (Current Project)
 - Using pgloader, Docker, and Bash scripts to migrate data from **MySQL** to **PostgreSQL**.
 - Developing a Golang server with route handling, **OIDC** authentication flows through [Globus Auth](#), and database interactions.
 - Drafting system diagrams in Lucid Charts to maintain our knowledge base and streamline developer onboarding processes.
 - Recording and organizing technical details for APIs and workflows in our team's Gitlab wiki.
 - Collaborating with stakeholders and project leads to build and iterate on backend features.

Projects

[Portfolio Link](#)

IOS Mobile App

- Launched a **SwiftUI** application on the [IOS App Store](#) that helps users keep track of their daily run statistics.
- Integrated a MapKit interface with native **GPS** tracking, enabling users to view their location in real time as they move.
- Implemented SwiftUI Charts to generate detailed historical analytics for logged time and steps.
- Set up an Apple SubscriptionStore to enable users to upgrade to a pro plan inside the app.

Stacked - Habit Tracking App

- Created a **Next.js** application ([stacked-habits.vercel.app](#)) that allows users to create and track their habits in a unified dashboard with statistics.
- Integrated Supabase Edge Functions and **ChatGPT** AI Tooling to process natural language requests and query information about user habits.

TabgMaps - Japan Restaurant Search Website

- Worked with two other developers to create a small **Svelte** website that allows users to find nearby restaurants in Japan.
- Designed the UI/UX with **Figma**, SvelteKit, Tailwind CSS.
- Built a Node.js endpoint to query restaurants from MongoDB based on the user's specified location, prefecture, cuisine, price range, and review ratings.

ACM Artificial Intelligence Website

- Redesigned the club's website using **React.js** (ai.acmucsd.com) reaching 1000+ members.
- Created reusable stylized components for club event data and board member profiles.
- Designed a new AI competition portal, enabling users to create teams, view leaderboard rankings, and upload bot submissions. This was recently used for the 2025 [StarChess](#) tournament with 30 teams and 100+ participants.

Video Game Development Club at UCSD Website

- Led the development team that launched a new website (vgdc.dev) using Next.js and **Tailwind CSS**.
- Incorporated a React Markdown [blog](#) system to deliver club-related insights and stories to members.
- Worked with devs to add Framer animations to enhance frontend components.

Bloom Book Android App - SDSC Summer Project

- Collaborated with SDSC students to develop an Android mobile application that helps monitor plant growth, track watering schedules, and record notes.
- Led design of backend schema in **Google Firebase**, Google Cloud Storage buckets for image uploads, and cloud functions for user deletion.
- Oversaw pair programming sessions, branch conflict resolutions, and merge requests on Gitlab.

Education

University of California, San Diego

Sep 2020 - Jun 2024

B.S. Machine Learning and Neural Computation
Minor in Computer Science Engineering

University Coursework

Data Structures & Algorithms, Software Engineering, Data Science, Web Client Languages, Computer Graphics, Image Processing, Functional Programming, Supervised Machine Learning, Neural Networks/Deep Learning, Parallel Computing with CUDA

Academic Accomplishments

- One of several winners in the 2023 CSE Pixel Art Competition featured [here](#)
- Created art assets for a 2D platformer video game with friends published on itch.io
- Featured work on the official class [website](#) for my computer graphics course

References

Project Manager

Jenny Nguyen
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Developer Lead

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