William Phong

(858)-209-9298 | williamphong10@gmail.com | linkedin.com/in/williamphong | waphong.com | github.com/williamphong

EDUCATION

California State University San Marcos 2024

Bachelor of Science in Computer Science — GPA: 3.87

- **Honors**: Cum Laude, Deans List Spring 2023 & 2024

PROJECTS

VR Earth Orbit Simulation

- Developed immersive VR educational tool to visualize astronomical concepts in collaboration with Dr. Kostadinov
- Solved an educational issue explaining astronomical concepts to students
- Built mathematical simulation core in C# handling orbital mechanics, Milankovitch cycles, and insolation

Portfolio Websites / waphong.com, crankiumknight.com, kwauche.com

- Built using Next.js with TypeScript, HTML, and Tailwind CSS, deployed on Vercel/Netlify.
- Integrated Google and Spotify OAuth using BetterAuth, with Prisma and PostgreSQL for data management.
- Implemented end-to-end testing with Playwright.

Formula 1 Race Prediction Application

- Developed predictive analytics model using linear/multinomial regression and XGBoost algorithms
- Managed data import/export operations with PostgreSQL and visualized results using Matplotlib.

Spotify Analytics

- Created dynamic word cloud generator visualizing musical preferences from Spotify daylist data
- Engineered with Python, MatPlotLib, and shows words weighted by occurrence
- Implemented secure OAuth 2.0 flow to process user data

Discord Bot

- Deployed a responsive Java Discord bot supporting 200+ users
- Containerized application using Docker for reliable 24/7 uptime on AWS infrastructure
- Integrates Spotify analytics project functionality with commands

Student Portal Mobile Application

- Spearheaded full-stack development following Agile methodologies with comprehensive SRS documentation
- Developed front-end app with Java and Android Studio
- Engineered authentication system using SHA-256 encryption with MySQL database for sensitive student data

EXPERIENCE

Debate Coach & Judge Aug 2019 – Present

Torrey Pines High School, Advanced Technologies Academy, Potomac Academy   *Local and National Circuit*

- Designed and implemented customized debate curricula for individual students and groups of 3-8
- Coordinated tournament logistics with high schools, colleges, and staff

Math & Reading Tutor Aug 2022 – Jan 2023

Kumon   *San Diego, CA*

- Delivered personalized instruction to 20+ students weekly, adapting to individual learning styles and needs

Customer Service Team Member Aug 2021 – Jan 2022

Einstein Bros. Bagels   *San Diego, CA*

- Delivered exceptional customer service and processed 50+ daily transactions accurately
- Onboarded and trained new team members on POS systems, inventory, and customer service protocols

SKILLS

Languages: C++, C#, Java, Python, SQL, HTML, CSS, JavaScript, TypeScript
Frameworks: React, Node.js, Tailwind, Flask, Django, Pandas, Matplotlib, JUnit, jQuery
Tools: Git, Docker, Linux, AWS, Google Cloud, Nginx, Vercel, Figma