William Kwon

□ (765) 701-5907 | ② williamkwon03@gmail.com | the LinkedIn | ♥ WilmKwn |

EDUCATION

Purdue University

West Lafayette, Indiana

B.S. in Computer Science

May 2025

• Relevant coursework: Data Structures & Algorithms, Software Engineering, Computer Architecture, Systems Programming, Discrete Math, Linear Algebra, Multivariate Calculus

TECHNICAL SKILLS

Languages: C/C++, JavaScript, Java, Python, Swift, SQL, x86-64 Assembly, Bash Scripting Tools: React.js, Express.js, Node.js, MongoDB, AWS, Google Firebase, Docker, DirectX SDK, Git

WORK EXPERIENCE

Sledgehammer Infosystems, Inc.

West Lafayette, IN
May 2023 - Aug 2023

Software Developer Apprentice

- Developed a **dynamic graphics control** for event signage and overlays of media assets.
- Implemented a desktop and a web interface to respectively handle the controls and display using **Electron.js**.
- Used Express.js to create a server side API layer to manage asset data and handle HTTP requests.

SCALE (Scalable Asymmetric Lifecycle Engagement)

West Lafayette, IN

Software Test Engineer Intern

Jan 2024 - PRESENT

- Automate software testing within the CI/CD pipeline for seamless integration with hardware components.
- Collaborate with other members of the SoCET (system-on-chip extension technologies) team.

Purdue Hello World

West Lafavette, IN

Web Developer

Feb 2023 - PRESENT

- Collaborated with a team of 6-8 developers to design and create the website for the Purdue Hackathon.
- Developed the Schedule & FAQs pages following different yearly themes using React.js and Bootstrap CSS.
- Guided event participants (300+) regarding technology during the hackathon.

Purdue Computer Science

West Lafayette, IN

Course Instructor

Jan 2024 - PRESENT

- Led and taught weekly lectures on iOS development in Swift following the MVC Design pattern.
- Managed a group of undergraduate teaching assistants for the course.
- \bullet Guided & assisted the enrolled students in the class as needed.

Undergraduate Teaching Assistant

Jun 2023 - Dec 2023

- Educated students on the concepts of OOP in Java.
- Guided students in the course (3,000+) through class lab sessions and office hours.
- Monitored and resolved students' inquiries on the class discussion page.

Projects

MuQu (Music Queuer) - Hackathon AWS Award Winner | GitHub

- Developed a Youtube video queuer that syncs the feed to all users on the platform.
- Created the frontend using **React.js** and the **YouTube Player API**.
- Managed asset-data and the syncing capabilities using AWS Services: API Gateway, Lambda, DynamoDB.

Racing Simulator | GitHub

- Developed a racing simulator that mimics the movement of cars in C++.
- Created a desktop window and handled user input using the Win32 API.
- Structured the core logic upon the 3D graphics pipeline built using **Direct3D**.

Fantasy Bets | GitHub

- Led a team of two developers to develop an app that allows users to create any custom bet among other users.
- Implemented the application with **React Native** and **Expo** build tools.
- Created the back-end with **Node.js** and linked **Google Firebase** to manage synchronous data.