KEVIN WU

EDUCATION

University of Waterloo

September 2023 - Present

Bachelor of Computer Science - 90% / 3.95 GPA

Waterloo, ON

- Scholarships and Awards: National Mathematics Scholarship (\$15,000), President's Scholarship (\$2,500)
- Coursework: Algorithm Design, Compilers (Adv.), Functional Programming, Object Oriented Programming

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, C#, C++, C, SQL, Java, HTML, CSS

Technologies/Libraries/Tools: Next.js, React, Git, Bash, MongoDB, Flask, Pandas, NumPy, SciPy, Selenium, OpenCV

EXPERIENCE

Software Developer Intern

May 2024 - September 2024

SaFuture Inc and Qwhery

Remote in Canada

- Developed and deployed 40+ new features across 25+ components and 14 pages to production using React, C# (.NET), and SQL (SSMS), reshaping an equipment management app for the mining industry
- Streamlined mining equipment management in a SQL database by designing and implementing user interfaces, endpoints, and procedures using **React**, **C#**, and **SQL**, following an **XP framework**
- Engineered robust pipelines for importing, exporting, and managing mining data via Excel, enabling offline equipment management. Built with **C#** and **VBA**, reduced manual input errors and **saved 3+ hours** of validation per sheet
- Automated PDF filling and generation on a <u>report-writing platform</u> for homeowners using **Selenium**, reducing manual efforts by **20** hours per week

Research and Product Development Intern

June 2022 - August 2022

McMaster University

Hamilton, ON

- Developed a **data-driven athletics product** for competitive swimmers to track metrics such as distance traveled underwater, strokes per length, breaths taken, working under Professor Zheng
- Designed wearable hardware using MbientLab MetaSensors to collect 10+ types of data relevant to swim quality
- Collected, analyzed, and processed sensor data (.csv) into 10,000+ data points per recorded swim using Python libaries
 NumPy, SciPy, Matplotlib to produce graphs and visualize underwater body movement
- Created algorithms to compute **7 unique** metrics for swimmers, enabling targeted improvements in swim performance.
- Used Jupyter Notebook and Agile methodologies to document progress and enhance collaboration and efficiency

PROJECTS

GitInsights () | TypeScript (React & Express), PostgreSQL

Best Dev Tool 2nd Place @ Hack The 6ix

- Created a **developer tool** to improve developers' understanding of codebases, placing **2nd** out of **300+** participants
- Created an API using auth0 and PostgreSQL to securely login and store user, repo, and summary information
- Utilized OpenAl API and GitHub API to tag commits and generate accurate summaries based on exact code changes
- Implemented an interactive visual timeline using D3.js, enabling users to track code activity across multiple branches

Memoir 🗘 | JavaScript (React), Python (Flask), MongoDB

- · Created a social media platform with account creation, user authentication, post creation, and data clustering.
- Employed Cohere for semantic analysis, then processed with a BIRCH Clustering algorithm to group posts by content.
- Implemented a connected node graph feature using Scikit-learn and D3.js, visualizing clustered data points.

Spotify Discover Whenever (7) | *JavaScript (React)*

- Produced a web app to help users find new recommendations at a time based on Spotify listening history
- Utilized REST API principles and Fetch to generate recommendations & create playlists, using Spotify's Web API
- Applied React, Tailwind, and Figma design principles for sleek UI design and improved UX with Spotify-themed display

Solaris Godot, GDScript

- Created a 2D platformer game using Godot, with interactive elements, 10+ equipable items, and 50+ levels.
- Collaborated with a team of 4 developers, testers, and graphic artists to enhance aesthetics and player experience.
- Built a variety of gameplay, ranging from game environment to boss levels, using a combination of Godot Engine nodes and scripts in GDScript