Kevin Wu

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Education

University of Waterloo **September 2023 – Present**
Bachelor of Computer Science - 90% / 4.0 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
Libraries/Frameworks: Next.js, React.js, Flask, Node.js, Pandas, NumPy, SciPy, Selenium, OpenCV, Tailwind
Databases/Cloud: PostgreSQL, SQL Server, MongoDB, AWS, Firebase

Experience

Software Engineer Intern **Jan 2025 - April 2025**
NationGraph *San Francisco, CA*

- Optimized automated ETL processes to transform unstructured PDFs and spreadsheets into database entries, improving accuracy by **400+%** and reducing cost by **60+%** using **Python** and **Airflow**
- Building new components of the product, using **Next, FastAPI,** and **Supabase** - more to come in the next 12 weeks

Software Developer Intern **May 2024 – August 2024**
SaFuture Inc *Toronto, ON*

- 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
- 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 **report-writing platform** for homeowners using **Selenium**, reducing manual efforts by **20** hours per week

Research and Product Development Intern **June 2022 – August 2022**
McMaster University, Supervisors: Dr. Rong Zheng *Hamilton, ON*

- Developed a **data-driven product** for swimmers to track performance metrics using wearable sensors (MetaSensors)
- Collected and processed **10,000+** points of sensor data to analyze **7+** key swim metrics, using **SciPy and NumPy**

Projects

GitInsights | *TypeScript (React & Express), PostgreSQL* **@ 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 **OpenAI 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* **@ UofTHacks**

- 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.

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**