Vincent Wan

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Relevant Skills

- **Languages:** C++, C, C#, Python, Java, HTML, CSS, JavaScript, SQL, Kotlin, Octave/MATLAB, R, Bash, PHP
- **Frameworks/Technologies:** Tensorflow, NumPy, Pandas, Keras, Flask, React, Redux, Node, .NET, WinForms, jQuery, Unity, Microsoft Azure, Linux, Excel, Git, XAMPP, MySQL, Tracker, Automation Studio
- **Other:** United States permanent resident (Green Card holder)

Work Experience

Software Developer Intern, ATS Corporation

Cambridge, ON, January - April 2023

- Created a user-friendly Python interface for the simulated PLC utilizing byte manipulation in shared memory, enabling clients to program and display real-time statistics through a cross-platform GUI toolkit, thereby significantly increasing the simulation software's functionalities.
- Manually verified servo delay of 7.6 milliseconds by recording shuttle and servo positions and velocities at various master speeds using a high-speed camera and physics modeling tool (Tracker), and determining if the data suggests a linear correlation, enhancing my proficiency in data analysis.
- Replaced all "pallet" strings in the simulation software with "shuttle" through cross-team collaboration, including contacting other teams for source files and software to generate diagrams and gifs, thus saving 2 weeks' worth of work time for the software team.

Software Developer and Design Intern, Yuja Inc.

Toronto, ON, May - August 2022

- Developed new features for their Video Conference service such as whiteboard color and highlighting options, emoji reactions to messages, and a permissions dialog, using Java, React, and Redux, increasing customer satisfaction.
- Ensured that the Video Conference service followed ARIA accessibility standards by using HTML, CSS, and JavaScript, to make content aria-labeled, tab accessible, and styled to meet the Web Content Accessibility Guidelines (WCAG).
- Improved my workplace communication skills by closely working with the QA team to fix bugs and successfully release new features that complied with the performance and design expectations of customers.

Projects

Hack the North 2023: Health Harbor

September 2023

- Developed a sophisticated pharmaceutical inventory management application featuring an optimized, scalable database for disease categorization, alongside a powerful AI clustering system utilizing state-of-the-art language models for disease diagnosis and medication recommendations.
- Designed an inventory interface for presenting the current stock of medications, with the medication inventory being sourced from an extensive dataset encompassing detailed medication information, quantities, descriptions, and image URLs.
- Implemented database queries and backend endpoints using Python, PostgreSQL, and Flask.

AGL Summer Game Jam 2022: Perfect Fit

June 2022

- Worked with two team members to design a game inspired by the game show "Hole in the Wall".
- Created the main menu and game logic, including how the wall moves and the scoring system, using the Unity Game Engine and C# scripts.

Education

University of Waterloo - *Candidate for Bachelor of Computer Science, 3B - Cumulative Average: 92.88%*

September 2020 - 2025