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# Vincent Wan

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[GitHub](#)

[Linkedin](#)

[My Website](#)

## Relevant Skills

- **Languages:** C#, C++, C, Python, Java, HTML, CSS, JavaScript, SQL, Kotlin, Octave/MATLAB, R, Bash, PHP
- **Frameworks/Technologies:** .NET, Docker, Terraform, Kubernetes, Google Cloud Platform, Vault, Redis, Tensorflow, NumPy, Pandas, MySQL, Flask, React, Redux, Node, Unity, CockroachDB, Cohere, Excel, Git
- **Other:** United States permanent resident (Green Card holder)

## Work Experience

### Software Developer Intern, Geotab

Waterloo, ON, September - December 2023

- Provided data on accumulated fuel and energy values of a vehicle's lifetime to customers by utilizing Firestore and applying the accumulator pattern on vehicle signals, alongside collaborating with the team to determine optimal signal processing methods, thus giving customers more complex insight into their vehicles.
- Increased the security of customer data by developing a POST API endpoint that redirects fleet credentials to be securely stored in Vault rather than an SQL database.
- Utilized Terraform to relocate a Pub/Sub topic across the entire project and configure permissions for a legacy service to access it, effectively improving the overall infrastructure of the data platform.

### 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 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.

## Projects

### Hack the North 2023: Health Harbor

September 2023

- Developed a sophisticated pharmaceutical inventory management application featuring a CockroachDB database for disease categorization, alongside a powerful AI clustering system utilizing Cohere's 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.

## Education

### University of Waterloo

*Bachelor of Computer Science with AI Specialization, Minor in Statistics - Cumulative Average: 92.88%*

September 2020 - April 2025