

# Vincent Sun

✉ vincentjsun@gmail.com | 🌐 vincentjsun.github.io | 💼 linkedin.com/in/vincentjsun | 📄 github.com/vincentjsun

## EDUCATION

### Candidate for Bachelor of Computer Science Honours

University of Waterloo

Sep. 2023 – Expected Apr. 2028

- cGPA: 94.18, Awards: René Descartes National Mathematics Scholarship, President's Scholarship of Distinction

## TECHNICAL SKILLS

**Languages:** Python, TypeScript, JavaScript, HTML/CSS, C, Racket

**Frameworks:** React.js, Django, Node.js, Pytest, Express.js, Mantine, Playwright, Pydantic

**Technologies:** REST, GraphQL, PostgreSQL, MongoDB, Pandas, Snowflake, TanStack Query, Elasticsearch, BASH

**Developer Tools:** Git, Visual Studio Code, Jupyter Notebook, DataGrip, PyCharm, Jira, Linear, LaTeX

## EXPERIENCES

### Software Engineering Intern

Secoda Inc.

May 2024 – Aug. 2024

- Created a failure detection monitor, reducing incident response time by **70%**, with **GraphQL** requests to **Linear**
- Decreased integration query speeds by **47%** through optimization of **Django ORM** database queries
- Engineered a sorting algorithm using dynamic weights with **Elasticsearch** to personalize user search results, built behind a search testing framework that is currently being shadow deployed
- Created analytics widgets for users to visualize their data trends and optimized metric update times by **32%**
- Developed a **Coalesce** integration to import jobs and tests built on **Snowflake** as well as data lineage

### Contract Programmer

Dupak Inc.

Jul. 2023 – Aug. 2023

- Reduced annual audit preparation time by **80%** by developing a label-based organization method and implementing **Google API** plugins to automate metadata updates
- Continually updated and collaborated with management during development to ensure requirements were met

### Web Developer

AWA DK Canada Inc.

Sep. 2021 – Apr. 2024

- Designed and created a website using **Wordpress** as the company's primary media platform
- Developed a multilingual setting and customized product pages using **HTML+CSS** detailing all specifications

## PROJECTS

**Memory Melody** | *JavaScript, React.js, Node.js, Express.js, Axios, GPT API, Cheerio* Jan. 2024

- Created a website that lets users input keywords to display nostalgic events while listening to music
- Fetched related images by using **Cheerio** and **GPT API**, with communication built using **Express.js** and **Axios**

**Harmony Haven** | *JavaScript, React.js, Node.js, Express.js, MongoDB, Chart.js* Aug. 2023

- Developed a game-like web application to improve users' singing using real-time pitch comparisons
- Dynamically sourced songs and lyrics from **YouTube** and **Spotify API** to display to the user
- Analyzed pitch with the **Web Audio API**, visualized data with **Chart.js**, and stored information in **MongoDB**

**Optimal Shopper** | *JavaScript, React.js, Node.js, Express.js, puppeteer* Jul. 2023

- Built a website that displays and compares products from nearby grocery stores
- Allowed users to sort results by distance, price, and store, and add products to a shopping list
- Scraped data with **puppeteer** in real-time, and communicated between front-end and backend with **Express.js**

**Spectra** | *Python, Raspberry Pi, OpenCV, Tensorflow* Jul. 2022

- Created an over-the-shoulder bag with a camera that provides audio feedback to assist visually impaired people
- Integrated text recognition and emotion detection features using **OpenCV** and **Tensorflow** into a **Raspberry Pi**
- Demonstrated the product to Ontario Tech University and was recognized for incubation

**Chester Voice Assistant** | *Python, SpeechRecognition, pyttsx3, BeautifulSoup, Google API* Feb. 2021

- Programmed a **Python** voice assistant that scrapes information, and adds events to the user's calendar
- Converted speech to text with the **SpeechRecognition** library and text to speech with the **pyttsx3** library
- Scraped with **BeautifulSoup**, leveraged **Google API** for scheduling, and played videos with **requests** library