

Kevin Wei

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EDUCATION

University of Waterloo

Major in Computer Engineering | Dean's Honour List (4.0 GPA)

Relevant Courses: Algorithms/Data Structures, Concurrency

Waterloo, ON

Sep 2022 – Apr 2026

SKILLS

Languages: Python, Java, C/C++, JavaScript, TypeScript, SQL

Technologies: Flask, PyTorch, FastAPI, Pandas, PyMongo, Spring Boot, React.js, Node.js, Vue.js, Nuxt.js

Developer Tools: AWS, GCP, Azure, MongoDB, PostgreSQL, HuggingFace, JupyterLab, Docker, Selenium

WORK EXPERIENCE

ML Engineer

May 2024 - Aug 2024

Chartd | PyTorch, AWS, Pandas, JupyterLab, Hugging Face

Ottawa, ON

- Developed and fine-tuned Google **Flan-T5**, Meta **Llama** and other LLMs with **PyTorch**, optimizing **NLP** tasks for Business Intelligence by improving classification accuracy by **17%** and summarization ROUGE scores by **19%**.
- Leveraged **AWS SageMaker**, **S3** and **ECR** for model training and data control, achieving **40%** reduction in overall training and deployment time
- Generated comprehensive training data with **Pandas**, referencing **Hugging Face** models and datasets to accelerate preprocessing time by up to **50%**.
- Integrated **Azure** to deploy and manage endpoints for integrating **OpenAI** models to enhance reports.

Full Stack Developer

Sep 2023 - Dec 2023

Chartd | Python, MongoDB, Pandas, Vue.js, Typescript, Docker

Ottawa, ON

- Worked on a Business Intelligence platform built atop NLP models to navigate financial data evaluations.
- Implemented a data **ETL** pipeline with **Python** to transfer data into **MongoDB** with **sub 3** seconds of latency.
- Configured a custom router with **4** async **FastAPI** endpoints to batch process **10,000+** user data points.
- Designed a Data Management page with **TypeScript** and **Vue.js**, letting users customize data transformation.
- Enforced data governance by creating robust **Pydantic** models that the language models infer to generate response.

Web Application Developer

Jan 2023 - Apr 2023

Chartd | Vue.js, Nuxt.js, TypeScript, JSON, HTML, SCSS, Cypress

Ottawa, ON

- Developed a financial management tool, Track Offsets, using **Vue.js** for multi-million dollar R&D contracts.
- Abstracted financial data from **JSON** to **TypeScript** objects for display in Tables, Graphs, and Charts.
- Implemented **CRUD** interfaces used in **over 50** instances throughout the app, using **Cypress** for End-to-End Testing.

PROJECTS

Expense Tracker | Python, React.js, Flask, JavaScript, Pandas, Google Cloud Platform

- Developed a mobile-friendly expense tracking app with **React.js** and **Python**, along with integration of **Google Cloud Platform** and Google Sheets.
- Integrated persistent Google Login with **OAuth 2.0** credential authentication by verifying tokens with Google Authorization Servers and storing them securely in **Cookies**.
- Utilised **Pandas** to format and aggregate thousands of transaction data points, and employed **Axios** to transmit data via HTTP requests to the app's backend API service.
- Designed a RESTful **Flask** API with stateless token-based authentication using **JSON Web Tokens (JWT)** containing HS256 encryptions.

E-Commerce Shop | Java, H2, JSP, Spring Boot, Spring MVC, Hibernate, Maven

- An e-commerce website developed with **Java**, **JSP**, and **Spring Boot** for buying and selling second-hand items.
- Configured a database with **H2 Database Engine** to store user info and items, which are accessed with **HQL** queries.
- Applied the MVC architectural pattern with **Spring MVC** for ease of organization and development.