Vanshaj Vohra

EDUCATION

Bachelor of Computer Science(Honours), University of Waterloo

Sep 2020 - Apr 2025

Relevant Coursework: Introduction to Machine Learning, Introduction to Artificial Intelligence, Algorithms, Operating Systems, Data Structures and Data Management, Object-Oriented Programming, Software Design and Architecture **Awards/Honours:** President's Scholarship of Distinction, Term Distinction x4

SKILLS

- Programming Languages: Python, TypeScript, JavaScript, C++, Java, Kotlin, Elixir, HTML/CSS, SQL, GraphQL
- Frameworks/Libraries: React, Flask, NumPy, PyTorch, Express.js, Node.js, PostgreSQL, pandas, XGBoost
- Tools: Git, Kubernetes, AWS, Postman, Jenkins, Docker, Datadog, RabbitMQ, Firebase, Ollama, K9s

WORK EXPERIENCE

Software Developer, the Score

Sep 2024 – Dec 2024 | Toronto, ON

- Integrated a new game studio (Pariplay) by developing functionality to handle wager, payout, balance and round history **REST API** requests using **Elixir**, bringing **115+ new casino games** to the Score Bet and ESPN Bet platforms.
- Designed endpoints to set promotion state for Light and Wonder studio, enabling free spins rewards for **85+ games**
- Enhanced **Datadog** logging for wallet requests and responses for **7** third-party gaming providers by creating a custom plug in **Elixir**, providing more detailed insights and improving traceability for real-time issue resolution.

Al Software Engineer Intern, Bespoke Metrics Inc.

May 2024 - Aug 2024 | Toronto, ON

- Spearheaded the end-to-end development of an artificial intelligence-based lightweight, high-accuracy data extraction and semantic search application using **Python**, **PyTorch**, **Transformers**, and **Faiss**, expediting processing workflows for large documents and reducing manual data verification time by **73%**.
- Developed a search feature that translates natural language user queries into **REST API** calls and triggers them using **Python**, **Flask**, **Ollama** and **Llama3.1** Large Language Model, simplifying discovery for new clients.

Software Developer Intern, Ford Motor Company

Sep 2023 – Dec 2023 | Waterloo, ON

- Restricted unauthorized third-party applications from launching in Lincoln vehicles' ultrawide digital dashboard by implementing security features in **Java**, **improving driver and passenger safety**.
- Reduced broadcast delays during **Android Auto** boot-up in panoramic dashboard infotainment systems using **Kotlin**, achieving a **65% reduction** in screen startup time and enhancing functional responsiveness.

Full Stack Software Engineer, AutoCate

May 2022 – Aug 2022 | Kitchener, ON

- Pioneered and launched a **company dashboard** in **Python**, **Flask** and **PostgreSQL** database equipped with user authentication, enabling **asynchronous request management** through a unified interface.
- Conducted market research, value proposition analysis, and designed usability studies for **120+ beta users**, discovering the top addressable challenges and iterating based on user research insights.

Software Engineering Intern, Ciena

Sep 2021 – Dec 2021 | Ottawa, ON

- Built a prototype of a **web-based visualizer** in **HTML**, **CSS**, **JavaScript** and **Node.js** to visualize key relationships between different network domains and microservices, **assisting 250+ developers** with troubleshooting.
- Designed automated test suites in **Python** for a file system **microservice** that uses YANG RPCs to execute Linux commands as part of a standardized embedded framework for packet optical products.

PROJECTS

Under 1.5th Place, NFL Big Data Bowl 2025 ∂

Dec 2024

• Built a machine learning model that predicts post-snap player behaviour by analyzing formations, motion patterns and player tracking data using **pandas**, **scikit-learn**, and **XGBoost**, equipped with actionable insights for defenses.

Expend, Expense Tracking Web Application *⊗*

Aug 2020

• Created an interactive web application in **TypeScript** and **React** to track my monthly expenses, equipped with intuitive colour settings, downloadable graphical insights and persistent local storage in the browser.