

# Travis Pan

## Computer Science and Finance

647-297-8886 | [travispan75@gmail.com](mailto:travispan75@gmail.com) | [LinkedIn](#) | [Github](#) | [Website](#)

### EDUCATION

---

#### University of Waterloo

*Bachelor of Computing and Financial Management*

Waterloo, Ontario

*September 2023 – June 2028 (Expected)*

### EXPERIENCE

---

#### Software Developer

*Government of Canada - PSPC*

January 2025 – Present

*Toronto, Ontario*

- Trained a hybrid **SARIMA XGBoost** model on financial data extracted and cleaned from SAP using **scikit-learn**, **XGBoost**, **statsmodels**, and **pandas**
- Developed a **RESTful backend API** using **Flask** to allow clients to retrieve machine learning insights on data
- Collaborated in an **Agile** environment to ensure timely delivery of solutions, resulting in a **23%** reduction in financial forecasting errors
- Used **Docker** for containerization to ensure consistency and scalability, and deployed applications to **Azure**

#### IT Analyst

*Financial Services Regulatory Authority of Ontario*

May 2024 – August 2024

*Toronto, Ontario*

- Maintained and enhanced frontend and backend of internal web applications (CETS, MBS) built with **React** and **.NET**, and performed regression testing with **Selenium**
- Created an AI chatbot for the IT portal using **OpenAI's API**, fine-tuning parameters for optimal performance
- Designed and optimized complex **SQL** queries to retrieve, analyze, and manipulate large datasets, improving data processing runtime by **30%**
- Became proficient in **Jira** for workload organization and used **Git** for streamlined version control

#### Junior Software Engineer

*University of Toronto URECS*

August 2022 – April 2023

*Toronto, Ontario*

- Developed a **slime mould algorithm** for the agent-based COBWEB simulation software
- Facilitated a code migration, translating legacy Java code in the COBWEB2 repository to Python
- Helped develop reliable test harnesses for **blackbox testing** of simulations using **Bayesian optimization**

### PROJECTS

---

#### Game Stats Analyzer Webapp | *JavaScript, React, Node.js, Express.js, MongoDB*

April 2024 – August 2024

- Developed a full-stack **MERN** application with 100+ peak users to automatically scrape, analyze, and visualize Pokémon Showdown data using **RESTful APIs**
- Implemented server-side processes with **Express.js** and **MongoDB** queries using **Mongoose**
- Built a dynamic, optimized, and modular frontend with **React**

#### Nostalgia Playlist Generator | *React, Node.js, Express.js, OpenAI API, Auth0*

January 2024 – January 2024

- Created a nostalgic imagery/soundtrack generator for UofTHacks XI
- Designed frontend using **React** and **Typescript** and backend using **Node.js** and **Express.js**
- Used **Auth0** and **Spotify API** to extract playlist data and user information
- Used **OpenAI API** and web scraping tools to generate nostalgic imagery

#### Citadel Terminal One Summer Invitational Tournament | *Python, Sphinx*

June 2024 – August 2024

- Developed a **Python** algorithm that advanced to the quarter-finals in the Terminal One tower defense competition
- Used dynamic programming, **Kruskal's algorithm**, and graph theory to optimize resource use and defenses
- Leveraged **Sphinx** to document the Python codebase, generating readable documentation for team members

### TECHNICAL SKILLS

---

**Languages:** C, C#, C++, Python, Java, JavaScript, TypeScript, HTML, CSS, Bash, SQL, PHP

**Libraries & Frameworks:** React, Angular, Node.js, Express.js, MongoDB, pandas, NumPy, Tailwind

**Tools:** Git, Linux, Selenium, Docker, Excel, Microsoft Office, Power BI, Jira

**Certifications:** AWS Cloud Practitioner