Ryan Zhang

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Education

University of Waterloo – Waterloo, ON, Canada   Class of 2020 – 2025

- **Major:** Computer Science (Third year), Honours, Co-operative Program, B.C.S (cumulative GPA: 3.9/4.0)
- **Relevant Coursework:** Database Management, Distributed Computing, Algorithm Design, Data Structures
- **Awards:** Faculty of Mathematics Scholarship, President's Scholarship of Distinction, 5 consecutive Term Distinctions

Experience

Software Engineering Intern – RxFood Co.   May 2023 – Aug 2023

- Reduced food database management workflow time by 50% through profiling, optimizations, and innovative features
- Improved productivity and ease of use for company registered dieticians with new frontend and backend capabilities
- Implemented robust quality assurance workflow ensuring precise services for prominent healthcare providers
- Skills Applied: React.js, Typescript, Python, Flask, SQL, PostgresQL, Git, Insomnia, OpenAPI, Google Cloud Platform

Undergraduate Research Assistant – OpAL Labs   Jan 2023 – Apr 2023

- Improved accuracy of graph models on graph datasets through creating new word embedding features
- Trained graph convolutional networks in node multiclassification tasks to achieve test accuracy of ~80%
- Researched documentation and peer-reviewed papers to implement new machine learning techniques
- Skills Applied: Python, NumPy, Matplotlib, GNNs, CNNs, Feature Engineering, Language Processing, R&D

Full Stack Developer – SS&C Technologies   Sep 2022 – Dec 2022

- Developed frontend services for 300 businesses by fixing bugs and creating a new calendar page from scratch
- Improved site functionality for 10+ million users by implementing new APIs to search databases for queried results
- Designed failsafe code to deliver security by developing unit tests and preforming end-to-end tests
- Skills Applied: Full Stack Web development (HTML, CSS, JavaScript), Vue.js, Java, Git, Vuetify, and AXE tools

Software Engineering Intern – VerticalScope Inc.   Jan 2022 – Apr 2022

- Improved UX/UI for 100+ million users by implementing 30+ frontend features and bug fixes to forum platforms
- Enhanced site functionality across 1200 sites by developing backend features such as sorting, filtering, and validation
- Prototyped AutoLinker API to regain lost revenue by changing third party affiliate addresses to company owned ones
- Skills Applied: Full Stack Web development (HTML, CSS, JavaScript, jQuery), PHP, SQL, Git, Jenkins, and Docker

Founding Frontend Engineer – Stadium   Jun 2021 – Aug 2021

- Delivered websites to clients by implementing 50+ user stories according to client and user specifications
- Created booking services for clients to internalize their revenue by developing RESTFUL APIs
- Reduced bugs to increase customer satisfaction via unit, integration, and end-to-end tests
- Skills Applied: React.js, TypeScript, JSX, Ruby on Rails, Material-UI, PostgresQL, Git, and Notion

Projects

CS Visualization Tool – catmachina.github.io/cs-visualization-tool   Aug 2022 – Present

- Developed a website that allows users to visually experiment with various algorithms
- Implemented graph theory algorithms including but not limited to Breadth First Search, Dijkstra, and A Star
- Skills Applied: HTML, CSS, JavaScript, jQuery, Graph Theory, Algorithmic knowledge, and Data Structures

Skills

Languages: TypeScript, JavaScript, C/C++, SQL, Python, R, PHP, Java
Frameworks / Tools: React.js, Vue.js, jQuery, Git, Postman, Insomnia, PostgresQL, Flask, GCP, Docker, Ruby on Rails