

Ryan Ramroop

ryan.ramroop@mail.utoronto.ca | linkedin.com/in/ryannjr/ | github.com/ryannjr | ryanjr.com

Education

University of Toronto

Toronto, ON

Specialist in Statistics, Data Science & Machine Learning Stream (Co-op)

2020-2025

- **Relevant Coursework:** Software Engineering, Software Architecture, Databases, Machine Learning, DSA

Technical Skills

Languages: Python, Java, C#, HTML, CSS (Tailwind, Less), JavaScript, TypeScript, SQL

Technologies: React, Next.js, Angular, .NET, Node.js, Express, Playwright, PostgreSQL, MSSQL, SQLite, MongoDB

Tools: AWS, Azure, Docker, Git, Jira, Visual Studio, Visual Studio Code

Concepts: APIs (REST), Agile, CI/CD, DevOps, Object Oriented Programming, ETL/ELT

Experience

Computer Talk Technology

Jan 2024 - Apr 2024

Software Developer Intern | Angular, TypeScript, .NET, MSSQL, Playwright, Azure

Toronto, ON

- Contributed to the design, maintenance, and bug-fixing of front-end web applications including implementing components and services as well as modernizing web pages by transitioning from **ASPX** pages to **Angular**
- Designed extensive unit and integration test cases for backend services employing **MSTest**, **C#** and **MSSQL**, resolving critical defects prior to release and achieving an overall **94%** code coverage
- Leveraged **Playwright**, a **Node.js** end-to-end testing library to enhance and extend a suite of over **300** test cases and improving test efficiency by **25%**, ensuring front-end UI is completely functional and adheres to **WCAG** standards
- Collaborated alongside QA team to build an automated solution to assist them with Solution Validation Testing utilizing **Playwright**, streamlining testing procedures from **8+ hours** to **30 minutes** and reducing processing time by over **93%**
- Employed agile development methodologies by having scrum meetings, participating in code reviews, sprint planning, and retrospective meetings, all managed through **Azure DevOps**

Projects

LangChain (Open Source Contributor) | Python, Pandas

[Github](#)

- Contributed a large-scale feature to LangChain, a framework for developing applications utilizing LLMs, with **10M+** monthly downloads and powering **50K+** applications
- Designed an output parser which transforms plain text **LLM** outputs to a **Pandas Dataframe**

GainzHub | MongoDB, Express, React Native, Node.js, AWS S3, Agile

[Github](#)

- Assisted with the development of GainzHub, a mobile fitness tracking app built and designed with **MongoDB**, **Express**, **React Native**, **Node** and **Amazon S3**
- Implemented features that include nutrition and workout logging, creating meal and workout plans, tracking BMI & BF% overtime with a social media aspect that allows users to interact with each other

Zoomer | Java, PostgreSQL, MongoDB, Neo4j, Docker, Maven, CI/CD

[Github](#)

- Engineered a high-performance **backend API gateway** in **Java**, facilitating microservice communication for a ride-sharing platform, emulating **Uber's** infrastructure
- Created location microservice, using **Neo4j** to store location data and find nearby drivers, trip-info microservice using **PostgreSQL** to handle transactions, schedule trips, and get driver information, as well as a User microservice using **MongoDB** to handle user authentication, and user data storage
- Applied API unit-testing with **JUnit**, resulting in **98% coverage** over all services

CarRental App | ASP.NET, React, Microsoft SQL Server, Stripe

[Github](#)

- Designed a full-stack **CRUD** application with payment, allowing users to purchase and manage car rentals
- Developed backend in the **.NET** framework, which includes creating business logic and data access layers
- Established a data management system using **MSSQL** to create, manipulate and query data from the database
- Designed user interface with **React** ensuring a modern and functional design
- Utilized external API **Stripe** to conduct and manage all payments and checkouts