

Gabriel Peralta

peraltag@uwindsor.ca (519) 991-8864

Toronto, ON LinkedIn: gabrielperaltam GitHub: 14gabe14 Website: 14gabe14.github.io

EXPERIENCE

Software Developer

Mar 2024 — Present

Royal Bank of Canada

Toronto, ON

- Played a key role in the development of a large-scale integration platform connecting multiple RBC applications to **Salesforce**, handling approximately **300,000 records** daily from over **20 million users** using **Java**, **Spring Boot**, and **SQL Server**
- Applied advanced multi-threading and parallel processing concepts to handle large-scale data integration, maintaining the correct order of operations to ensure data integrity in Salesforce
- Optimized processing speed by implementing a batching mechanism, increasing TPS by **208%**, **286%**, and **1485%**
- Redesigned database operations using an Enum-based strategy, eliminating code redundancy and simplifying the maintenance and scalability of processing components, which reduced potential future development efforts by 50%
- Decoupled complex processing logic into modular components, addressing performance bottlenecks and improving the overall system's efficiency, particularly in managing different types of records with varying processing requirements
- Handled deployments and troubleshooting using **Jenkins** and **OpenShift**

Software Developer Intern

Jan 2022 — Aug 2022

Royal Bank of Canada

Toronto, ON

- Contributed to the implementation of an integration and data mapping platform between CRM systems and Salesforce
- Built an event listener to process client system business events using **Java**, **Spring Boot**, **SQL**, and **Apache Kafka**
- Managed and maintained APIs using Spring Boot, SQL Server Management Studio, and Postman
- Conducted 80+ unit tests to increase test coverage across the team code base using JUnit and Mockito

Junior Software Developer

May 2021 — Aug 2021

MiTek Canada

Bradford, ON

- Migrated a monolithic app with over 10,000 users to cloud-hosted **microservices** using **.NET**, and **C#**
- Designed UI components using **Angular** in Typescript, connected to microservices APIs
- Delivered a final project presentation to company executives and employees
- Devised unit tests for Angular components using Jasmine and Karma

SKILLS

Languages	Python, Java, C#, C/C++, JavaScript, SQL, Bash
Frameworks	Spring Boot, .NET, Django, React, Angular, PyTorch, Tensorflow, NumPy, Pandas
Tools	Git, Docker, Kubernetes, MS SQL Server, OpenShift, MongoDB, Apache Kafka, Postman
SWE Practices	Scalability, Multi-threading, Software Design Patterns, Code Reusability, Performance Optimization

EDUCATION

Bachelor of Computer Science Honours Co-op, with Artificial Intelligence Specialization

May 2024

University of Windsor, Windsor, ON

GPA: 94.6%

Minor in Mathematics & Biology

Awards: Co-op Rising Student Star Award, Outstanding Scholars, President's Honour Roll, Dean's List, Alumni In-Course Scholarship

Relevant Courses: Data Structures & Algorithms, Database Management Systems, Object-Oriented Programming Using Java, Systems Programming, Computer Networks, Operating Systems, NoSQL, Big Data, and Spark Fundamentals, Software Architecture & Design of Modern Large-Scale Systems

Activities: CS Games, Artificial Intelligence Club, ICPC Regional Contest, Students Offering Support

PROJECTS

Epileptic Seizure Prediction

May 2022 — Jun 2022

AI4Good Lab

Toronto, ON

- Collaborated with a group of 6 to develop **EpiHealth**, a platform for predicting epileptic seizures from wearable data
- Conducted data preprocessing using **Pandas** and **Numpy**, and trained and implemented an LSTM architecture using **Pytorch**
- Awarded \$2000 by Toronto Cohort's Accelerator for developing EpiHealth

Snake AI

Jan 2021 — Apr 2021

- Implemented a Deep Q Network with architectures including MLP and CNN for reinforcement learning
- Trained the model to autonomously play the Atari game "Snake" using PyTorch and Pygame libraries