Bradley Liu

Software Engineer

+1(438)860-0415
bradley121901@gmail.com
https://www.linkedin.com/in/bradleyliu121901
https://bradley121901.github.io
Toronto, Canada (with ability to relocate)

INDUSTRY EXPERIENCE

Wealthsimple   *May 2025 - December 2025*   **Software Engineer Intern**

- Contributed to **SpringBoot/Vaadin/Kotlin/Oracle/PostgreSQL** application solution to **Oracle** Forms migration
- **Shipped** features to **production** (recording transactions to General Ledger, pagination, UI features, JUnit tests)
- **Lead migration** of several features off of **Oracle stored procedures** to connect to other various backend services.
- Total refactor of code to utilize **coroutines** and **channels** for **concurrency**, increasing reliability and performance
- **On call** duties requiring **cross platform** team **communication** leveraging **Datadog**, **Preset**, and **SQL** queries
- Integrated **Segment** analytics to track user actions and **Mixpanel** destination source for data visualization
- Implemented Jira Story Advisor application with **AWS services (IAM, SQS, EKS)**, deployed within a **Kubernetes** cluster
- Help implemented **trade execution** features by **migrating** service calls and **deprecating** original service
- Modified **Airflow** data pipeline to include new **Spark** transformations for handling CDS tax year data with **S3 buckets**
- Created **production web features** to bulk download tax/monthly statements and display foreign assets in **mobile app**
- Backtraced backend service flows to **resolve bugs** found in different web/mobile frontend features

Thales Group   *April 2024 - December 2024*   **Software Developer Intern**

- Created command line interface tool that is **automatically generated** from **any Swagger** specification
- Modified **open source** code (https://github.com/OpenAPITools/openapi-generator) to generate **custom Go** code
- Built application **CI/CD pipeline** containerizing pipeline stages' build environments, incorporating deployed containers with linter, build, test, and **Synopsys** scan stages
- Application **shipped to customers** with HSM operating system's finalized API specification

Royal Bank of Canada   *September 2023 - December 2023*   **Android Developer Intern**

- Implemented **Android Kotlin** passwordless **authentication** using Google's Credential Manager **API** within the login and register flow for **RBC's Android Mobile Banking** application
- Created Proof of Concept by mocking **backend server requests** and documented implementation and limitations
- Created **Python** script to **automate** and replace manual **APK** checklists before the Google Play Store upload eliminating developer time and optimizing developer flexibility significantly

Morgan Stanley   *January 2023 - August 2023*   **Software Developer Intern**

- Application **containerization** in a complex enterprise **e-business** applications environment on **RedHat OpenShift**
- Took part in creating, teaching and hosting firmwide **workshops** on **cloud migration**
- Built **React.js** workshop front-end site, then containerized and deployed into cloud with a new Jenkins pipeline
- Incorporated **automated** regression **Cypress testing** into **Jenkins CI/CD** pipeline.

Computer Methods International Corp.   *August 2022 - January 2023*   **Software Developer Intern**

- Work in **Oracle database** (**PL/SQL Developer**) integrating new **data pipelines** for **data mapping** between partners
- Wrote **SQL scripts** for cleaning data, debugging, and resolving database errors in the ETL process
- Created **Python** script to replace manual setup of parameters for data pipelines
- Tested **RESTAPIs** using **Postman**, and created documentation outlining bug and errors

EDUCATION

Honors, BSc in Computer Science   *June 2025 (New Grad)*   **University of Ottawa, Canada**

PROJECTS (https://github.com/bradley121901)

Full Stack Web/Mobile, Large Data Analysis and Visualization, Machine Learning Clustering and Prediction projects.

Computer Vision Cat Toy   Raspberry Pi + OpenCV + TFLite + YOLOv8 + SwiftUI

Intelligent, app-controlled laser toy for cats, leveraging YOLOv8 for real-time tracking and SwiftUI for an intuitive user interface. FASTAPI server hosted on a Raspberry Pi, communicating HTTP requests between its Swift frontend server.

SKILLS & TOOLS

Languages (Java, Kotlin, Python, Golang, Ruby), **Frontend** (React Native, Typescript, Vaadin, React.js, Three.js, OpenGL, Android), **Backend** (SpringBoot, Rails, Django, Flask), **Database** (Oracle, PostgreSQL, MySQL, MongoDB), **Cloud** (Docker, Kubernetes, OpenShift, Azure) , **Tools** (AWS SQS/Lambda/S3, Apache Kafka/Airflow/Spark, Redis, Linux, Git, VS Code, IntelliJ Toolbox, Android Studio, Xcode, PL/SQL Developer, Github Actions, Jenkins, GitLab CI/CD, Pandas, Segment Analytics, Mixpanel, Selenium, Synopsys Blackduck, Linters, Maven, Datadog, JUnit, RestAPIs, GraphQL)

AWARDS & ACHIEVEMENTS

Merit Scholarships & Dean's Honour List	University of Ottawa	2020 - 2024
Certificates of Distinction CEMC	University of Waterloo	2014 - 2019

LANGUAGES

English (native), French (classroom proficiency)