

ALEXA HERNANDEZ

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[LinkedIn](#) • [Website](#) • [GitHub](#)

EDUCATION

MCGILL UNIVERSITY

Montreal, QC

2020 – 2023

- **M.Sc. Computer Science**; GPA: 4.0/4.0 ([thesis](#))
 - Published [paper](#); \$23,000 Provincial Research Scholarship; Graduate Excellence Fellowship.
- **B.A. Computer Science, Minor in Management**; GPA: 3.91/4.0
 - Dean's Honours List; Mary Coppin Scholarship; McGill Food Analytics Club.

2016 – 2020

EXPERIENCE

SOFTWARE DEVELOPMENT ENGINEER • AMAZON

Aug 2022 – Present

- Implemented features on the Amazon app that facilitate navigation and discovery of products. These features have over 82MM monthly active users (**Java Android, Objective-C iOS, React Native, JavaScript**).
 - Merged 70 CRs (~1.5 revisions/review), reviewed 21 CRs, and performed 4 experiments.
 - Refactored a feature with 10MM users/month: added dynamic styling to facilitate A/B testing, replaced absolute layouts with relative ones and increased abstraction to improve reusability and extensibility.
- Participated in the oncall rotation: resolved 28 tickets and created a tool that generates oncall handover reports, saving my team 6 hours/month (**NodeJS**).
- Developed an AWS solution to comply with data privacy laws using **CloudFormation, Lambda, SQS, CDK, SNS**.

SOFTWARE DEVELOPER INTERN • SOCIÉTÉ GÉNÉRALE INVESTMENT BANK

May 2019 – Aug 2020

- Developed an intelligent production support chatbot using **Python, PostgreSQL, Docker, and Rasa NLU**, saving support analysts ~30mins/day by answering frequently asked questions.
- Co-created a Chatbot League after noticing a lack of governance:
 - Decreased time-to-market to 3 weeks by producing **Python** microservices, documentation, and tutorials.
 - Reduced duplicate efforts by monitoring chatbot projects and hosting league meetings, each with 40+ attendees, to increase synergies amongst teams.

SOFTWARE ENGINEERING RESEARCHER • MCGILL UNIVERSITY

Jan 2019 – Aug 2022

- Devised Teslo, a tool to improve test suite quality by detecting inconsistent applications of test conventions. Implemented a **Java** backend that identifies patterns in ASTs and a **Vaadin** frontend to display the results.
- Co-developed [DScribe](#), a novel template-based approach to co-generate Java unit tests and documentation. Enhanced the UX by creating an **Eclipse Plugin** and implementing **Java annotations** that invoke templates.

FRONTEND DEVELOPER • SANTROPOL ROULANT

Sept 2019 – April 2020

- Collaborated with fellow McGill Food Analytics Club members to help Santropol Roulant, a food security NGO, streamline staff operations by developing a volunteer management system using **Angular** and **Firestore**.
- Implemented core features including shift scheduling, volunteer creation, and schedule change notifications.

PROJECTS

- [DataOnTap](#): developed a scalable business intelligence solution which scrapes SAQ inventory data to generate dashboards using **Python, AWS Lambda, Ruby on Rails, PostgreSQL, Snowflake** (2020-2022)
- [Movie Recommender](#): developed a smart and scalable movie recommender using **FastAPI, Docker, MongoDB, Kafka, Prometheus**, and **Grafana**. It includes a load balancer, feedback loop, and CI/CD (2021)

SKILLS

Languages: Java, Python, Objective-C, C, JavaScript, TypeScript, SQL, HTML, CSS, Ruby

Technologies: RDBMS (PostgreSQL, MSSQL), AWS, Eclipse, IntelliJ, Visual Studio, Git, MongoDB, Docker

Frameworks/Concepts: Android Studio, AWS CDK, JUnit, Jest, React Native, Angular, Agile, Kafka, Microservice Architecture, CI/CD, Ruby on Rails