

Abdalla Sarhan

✉ abdallasarhan128@gmail.com | ☎ 587-937-7321 | 🌐 [Portfolio Website](#)

EDUCATION

YORK UNIVERSITY | B.ENG., SPEC. HONS. COMPUTER ENGINEERING

September 2020 - April 2025

EXPERIENCE

SUN LIFE FINANCIAL | SOFTWARE ENGINEER INTERN

September 2023 - December 2023 | Toronto, ON

- Conducted **penetration testing** on Sun Life's infrastructure and web applications, utilizing **Burp Suite**, resulting in the identification and remediation of **100's of potential vulnerabilities** to enhance overall system security.
- Collaborated with senior software engineers to develop a Proof of Concept for **malware protection**, focusing on **preventing malicious file uploads**. Leveraged **Akamai's** robust capabilities to fortify the application's security.

SUN LIFE FINANCIAL | INFRASTRUCTURE SOLUTION ARCHITECT CO-OP

May 2023 - August 2023 | Toronto, ON

- Containerized a Java application using **Docker**, increasing its **portability**. Orchestrated deployment on **Red Hat OpenShift** using **YAML**. Gaining expertise in configuration file creation for efficient **resource management** and seamless **communication between components**.
- Created proof of concepts using AWS services such as **AWS Lambda**, **Amazon Lex**, and **Amazon Connect**.

BITSPIRE INC | SOFTWARE ENGINEER INTERN

May 2022 - August 2022 | Toronto, ON

- Developed and improved existing components on web applications using **Gatsby**, **TypeScript**, and **Recoil**.
- Migrated an Apache Pulsar microservice from **Node.JS** to **Scala** and **ZIO** to improve overall performance of the application. Implemented both producer and consumer components following the **publish-subscribe messaging pattern**.
- Created an internal tool which **accelerated the development of react forms by 2 times** with easy ways to update and store form data using **JSON schemas**.

PROJECTS

CAMPUNITY | FULL STACK MOBILE APP | University buy and sell marketplace | React Native, Firebase | 🌐

- Developed frontend using **React Native CLI** and **Firebase** for the backend (Firestore, Storage, Authentication).
- Used **Firestore** to read and write users data, posts, and services. Leveraged **Firebase Storage** for storing images.
- Utilized **Custom Hooks with React Context** for different categories of data such as products, services, users.

AIRBNB BACKEND CLONE | BACKEND APPLICATION | AirBnB backend clone | NestJS, MongoDB, Docker | 🌐

- Developed using **microservice architecture**, keeping maintainability and scalability in mind. Containerized each application separately using **Docker** for deployment flexibility.
- Key features include user authentication, reservation management, payment processing with **Stripe**, and email notifications with **Nodemailer**.

STUDENTHUB | FULL STACK WEB APP | Student management system | Spring Boot, AWS, Docker, Postgres | 🌐

- Created a web application using **Java Spring Boot** following the MVC design pattern.
- Purpose: Experimenting with deployment on **AWS Elastic Beanstalk** and **containerization using Docker**.

GEOSNAP | FULL STACK MOBILE APP | Image sharing map app | React Native, Node.JS, MongoDB, S3, MapBox | 🌐

TECHNICAL SKILLS

PROGRAMMING LANGUAGES

Java • Python • C • JavaScript/TypeScript • YAML

TOOLS & FRAMEWORKS

React/React Native • Node.js • Spring Boot
• Kubernetes • AWS • Bash • Docker

EXTRACURRICULAR

- **VP Communications** | York Engineering Competition
- **Software Developer** | Lassonde Blockchain Association
- **Member** | Google Developer Student Club
- **Tutoring** | Helping student's build real world projects and tying it back to academics