

Aly Saleh

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Experience

Morgan Stanley | Software Developer

02/2024 – present
Montreal, Canada

- Modernized communication between 9 risk systems by replacing REST API calls with a **Kafka** cluster, enhancing message throughput by 27%.
- Guided **7 teams** in integrating application monitoring tools (**Prometheus**, **Grafana** and **OpenTelemetry**), reducing average issue detection time by 30%.
- Designed and developed a dashboard using **Spring Boot**, **Angular** and **GraphQL** to show instances of failures for over 30 automated jobs, providing real time alerts to 90+ stakeholders.
- Implemented an alerting system using **PagerDuty** and **OpenTelemetry** that detects latency spikes, reducing issue detection time.
- Designed a **Grafana** dashboard displaying 16 key performance metrics (CPU, memory, latency, errors) for an application, allowing rapid identification of performance bottlenecks.
- Used **Java** to optimize a Spring Boot application's database saving functionality by reducing data size by 15% while preserving full information integrity.

Morgan Stanley | Software Developer Intern

05/2023 – 08/2023
Montreal, Canada

- Created a Python program that automatically deploys **Grafana** and **Prometheus** for a web application, collecting 75+ application performance metrics.
- Added **MongoDB GridFS** functionality to an application, allowing for the storage of files over 16 MBs.

LIDD Consultants | Software Developer Intern

01/2023 – 04/2023
Montreal, Canada

- Utilized Postman for testing REST API calls for a Warehouse Management System Integration.
- Designed solutions for clients using **JavaScript** to add functionalities to Oracle's NetSuite.

LIDD Consultants | Software Developer Intern

05/2022 – 08/2022
Montreal, Canada

- Used **Python** to write integration tests that identified silent errors that would have resulted in lost orders, preventing potential revenue loss for the client company.
- Implemented the request structure for a SOAP integration that is used by **NetSuite** for a company valued at \$50M+.
- Provided training for employees that come from a non-technical background.

Education

McGill University | GPA 3.77 | Distinction

09/2020 – 12/2023
Montreal, Canada

Bachelor of Arts, Computer Science Major
Statistics and Supplementary Computer Science Minors

- **Relevant Courses:** Distributed Systems, Computer Systems, Operating Systems, Database Systems, Software Design, Data Science, Applied Machine Learning, Artificial Intelligence
- **Awards and Certifications:** Monitoring and Observability for Application Developers 🏆, Dean's Honour List 2021, McHacks Accessibility Prize, McHacks Forward Thinking Prize

Skills

Languages: Java, Python, C, SQL, TypeScript, C#, Scala, Ocaml, R, HTML, CSS

Technologies & Frameworks: Grafana, Prometheus, OpenTelemetry, Kafka, ZooKeeper, Kubernetes, GraphQL, Jenkins, Spring Boot, Flask, Angular, AWS EC2, REST API, Neo4j, MongoDB, Hadoop

Projects

Monte Carlo AI Bot | Python 🏆

- Designed a game-playing agent that uses Pure Monte Carlo Search and Minimax to create simulations to decide the best next move against an adversarial agent.

Leadership

Hack McGill | Sponsorship Coordinator

04/2023 – 02/2024
Montreal, Canada

- Raised \$10,000+ for McHacks, McGill's largest hackathon with 400+ attendees, via sponsors.

Computer Science Undergraduate Society | Juniors/Seniors Representative

06/2022 – 05/2023
Montreal, Canada

- Represented 300+ students. Organized academic events that allowed students to discuss research opportunities with professors.