Aly Saleh

Education

McGill University | GPA 3.77 | Distinction

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

Experience

Morgan Stanley | Software Developer

• Helped 7 teams across the risk department in integrating application monitoring tools such as Prometheus, Grafana, and OpenTelemetry, enabling better performance insights and issue detection.

 Modernized communication between 9 risk systems by replacing REST API calls with a Kafka cluster, enhancing scalability and system reliability.

• Used **Angular** to display real-time information used by risk managers.

 Implemented an alerting system using PagerDuty and OpenTelemetry that detects latency spikes in my team's application, helping in identifying issues before they impact users.

• Designed a **Grafana** dashboard for measuring the application's responsiveness and health by displaying 16 different metrics, identifying 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

Designed and implemented a program that automatically configures and launches **Prometheus** and **Grafana** when an application is launched, collecting 75+ metrics.

• Selected among 15 out of 70 interns to demo my project in Morgan Stanley's annual technology fair.

LIDD Consultants | Software Developer Intern

• 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

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.

Tova Designs | Marketing Analyst Intern

• Used **Python** to analyze and visualize ads data resulting in a 50% decrease in the cost per engagement for online ads.

06/2021 - 08/2021

09/2020 - 12/2023

Montreal, Canada

02/2024 - present

Montreal, Canada

05/2023 - 08/2023

Montreal, Canada

01/2023 - 04/2023

Montreal, Canada

05/2022 - 08/2022

Montreal, Canada

Remote

Skills

Languages: Java, Python, C, SQL, TypeScript, JavaScript, 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 Cool	dinator

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

04/2023 - 02/2024 Montreal, Canada

Computer Science Undergraduate Society | Juniors/Seniors Representative

Montreal, Canada

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

06/2022 - 05/2023