ALI NOUREDDINE

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LinkedIn — GitHub

EDUCATION

Bachelor of Computer Engineering Co-op　　　　　　　　　　　　　　*Cumulative GPA: 3.95/4.30*
Concordia University, Montreal, QC　　　　　　　　　　　　　　　　　　　*2021 – 2026 (Expected)*
Relevant Coursework: Data Structures & Algorithms, Operating Systems, Software Engineering Process, Databases

PROFESSIONAL EXPERIENCE

Backend Developer Intern　　　　　　　　　　　　　　　　　　　*May 2024 – September 2024*
SwiftConnect (AccessCloud), Montreal, QC
- Developed and maintained RESTful APIs for AccessCloud's digital identity management, access control, and visitor management systems
- Optimized backend services for efficient, real-time synchronization of access permissions across multiple systems
- Developed custom data unmarshalling using type reflection, increasing list operation speed by 50% compared to standard JSON marshalling
- Gained experience with containerized environments using Docker and Kubernetes in AWS cloud infrastructure
- Actively participated in Agile development processes, including daily stand-ups, sprint planning, and retrospectives

Software Developer Intern　　　　　　　　　　　　　　　　　　　　*April 2023 – April 2024*
SwiftConnect (Core), Montreal, QC
- Built and maintained Golang-based test suites, increasing overall test coverage by 40% and improving platform stability
- Developed Kafka consumers for centralized log aggregation that help identifying and diagnosing system issues
- Utilized pprof to diagnose and resolve a critical memory leak in a key service, preventing recurring out-of-memory crashes
- Set up flows replicating client environments in staging to ensure service verification and stability before release

TECHNICAL SKILLS

- **Languages**: Go, Java, JavaScript, Python, C/C++, SQL, VHDL
- **Technologies**: AWS, Google cloud, RabbitMQ, RESTful APIs, Microservices, Apache Kafka, Docker, Git
- **Frameworks**: React, Node.js, Spring Boot, Flask, gRPC
- **Tools**: Postman, Jira, Jenkins, Kubernetes
- **Methodologies**: Agile/Scrum, Test-Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD)

PROJECTS

MysticFunds — Go, gRPC, PostgreSQL, Microservices Architecture　　　　　GitHub: MysticFunds
- Architected a microservices-based financial system with 5 independent services using Go and gRPC
- Implemented JWT-based authentication and role-based access control, securing all microservices
- Implemented an API Gateway for routing, authentication, and HTTP-to-gRPC communication
- Utilized Protocol Buffers for efficient data serialization, improving system performance by 20%

TalentVault — MERN Stack (MongoDB, Express.js, React, Node.js)　　　　GitHub: TalentVault
- Led a team of 5 to build a full-stack web application for streamlining job search processes
- Designed RESTful API endpoints, facilitating efficient front-end and back-end communication
- Added real-time notifications using Socket.io, ensuring users received updates instantly
- Followed Agile methodologies, managing sprints and retrospectives to meet project deadlines

ZenStay — Go, PostgreSQL, RESTful API　　　　　　　　　　　　　　　GitHub: ZenStay
- Built a Bed & Breakfast booking and reservation system using Go and PostgreSQL
- Developed a RESTful API for seamless communication between frontend and backend
- Designed and implemented a PostgreSQL database for efficient data management
- Implemented user authentication and session management for enhanced security

Hovercraft Design Project — C++, Arduino　　　　　　　GitHub: Hovercraft Design Project
- Developed an autonomous hovercraft capable of navigating a maze using C++ and Arduino for control
- Integrated sensors, fans, and servos for movement and obstacle detection
- Applied object-oriented principles for modular, easily adjustable code

HONORS & AWARDS

Dean's List　　　　　　　　　　　　　　　　　　　　　　　　　　　　*2021 – 2024*
Concordia University
Recognized for outstanding academic achievement, maintaining a high GPA for three consecutive years

International Honour Society Membership　　　　　　　　　　　　　　　*2022 – Present*
Golden Key
Awarded to students ranking in the top 15% of their program