DevOps & Backend Developer

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EDUCATION

LAVAL UNIVERSITY   Quebec, Canada
Bachelor in Software Engineering   **Graduation in December 2025**

- Course: *Models and Languages for Databases, Dev. Web for Engineers, Algorithms and Data Structures for Engineers, Engineering Economic Analysis, Software Engineering Processes, Software Architecture, Software Metric Quality*
- *GPA: 3.45*
- **Strengths: Python, Java, AWS DevOps, experience with Kubernetes**

JOB EXPERIENCE

DESJARDINS TECHNOLOGY GROUP   **Software Developer, Intern**   Montreal, Canada
Azure DevOps   Summer 2023

- Python development on a backend interacting with databases such as PostgreSQL, Redis, and AzureSQL
- Creating CI/CD pipelines and managing infrastructure as code using YAML/Bash
- Shell script development for production deployments

MINISTRY OF CYBERSECURITY AND DIGITAL TECHNOLOGY   **Software Developer, Intern**   Quebec, Canada
AWS DevOps   Winter 2023

- Optimization of Spring boot microservices, in the API, reducing load time by 2 seconds
- Creating a System Manager Configuration for the Ministry's Cloud Platform on AWS:
  - Encrypted S3 database with KMS, CloudWatch for logging, encrypted EC2 instances.
- Optimized the CI/CD pipeline for iterative deployments.
- Terraform code development and optimization for building 30+ AWS instances, such as EC2, Kubernetes (EKS), and Cloudwatch:
  - Result: $300 per month savings on AWS pricing per team
- Writing Unit Tests with JUnit 5 and Mockito

OUTLIER AI Math Trainer   Quebec, Canada
Generative Artificial Intelligence   Since April 2024
- Analyses of several types of generative AI (GPTs)
- Evaluation of AI queries and outputs on linear algebra questions
- Matrices, vectors, differential calculus, integrals. Etc...
- Part-time hobbies at a distance

SKILLS

Structures and algorithms : **Binary search,** Dijkstra**,** binary tree
Software and languages: Python, Java, SQL, REST, C/C++, HTML/CSS, Bash, Vue.js and Javascript
Tools : LINUX, AWS (DynamoDB, S3, EC2, KMS), Kubernetes, Jira, Git, Azure, CI/CD, DOCKER
Languages: English (fluent) / French (mother tongue) / Arabic (fluent)

PROJECT EXPERIENCE

Models and languages for databases
Online jewelry store   Winter 2023
- Database: MySQL
- API and Backend: JavaScript and Python, Front-end: HTML and CSS

Object-Oriented Software Engineering
Cottage Design App   Fall 2023
- Fullstack Java

Software Engineering Process
Online restaurant reservation tool   Winter 2024
- Database: MongoDB
- API and backend: Java with Docker

Web Development for Engineers
Web catalogue of restaurants in the Quebec City area   Winter 2023
- JavaScript and Vue.js

Final Project in Software Engineering: Design IV   Winter 2025
Document Censoring Application for CGI Inc.
- Development of a software solution automating the anonymization of sensitive administrative documents.
- Identification and contextual replacement of personal information (names, addresses, etc.) with fictitious data.
- Implementation of natural language processing techniques and ML algorithms (LLM) in Python., front-end with React

Course: Design III
Intelligent Merchandise Delivery Robot   Winter 2025
- Development of an autonomous vehicle to transport goods in a city, with the triggering of missions via a developed web interface.
- Implement dynamic route algorithms based on the availability of goods, and avoid collisions with the environment and other vehicles.
- Integration of a Jetson system for real-time data processing (lidar, camera, proximity sensor) and motor control.
- Navigation based on QR code and wall detection via lidar, with adaptation to different urban configurations.
- Python with ROS2, front-end with React