

Mouhamed Abdoul Aziz Diop

mouhazize2000@gmail.com | +1-514-809-0040 | Montréal, Canada

EDUCATION

Polytechnic of Montreal

Montreal, Canada

Bachelor of software engineer | Minor in artificial intelligence

Graduated in December 2023

- **Relevant Coursework:** Microcomputer Architecture, Computer Networking, Database courses, Data Structures and Algorithms, Object Oriented Programming, Software Architecture, Web Development, Operating System, Embedded System, Microcontroller, Compiler and Language elements, Testing and Validation method, Cloud Computing, AI courses, DevOps courses.
- **Coursework related to personal interests:** Principle of Economics, Interpersonal and Relational Skills.

SKILLS

- **Technical Skills:** C++, Java, STM32, Atmega, Arduino, Typescript, Javascript, C, Angular, Node.js, Linux, MySQL, SQL, MongoDB, Python, HTML, CSS, Jenkins, Jira, Nest.js, Apache servers, React, API, IP, HTTP, Xamarin, SonarCloud, Postman, MATLAB, NumPy, Pandas, Machine Learning, Research and Development, Statistics, Spring, Oracle, Maven, Git, JUnit, C#, Data Visualization, Shell scripting, Perl scripting.
- **Professional Skills:** Agile methods, Analytical and problem-solving, Computer Science, Infrastructure, Research and Development, Writing, Team Collaboration, Communication Skills, Adaptability, Time Management, Leadership, Attention to Detail, Critical Thinking, Continuous Learning, Interpersonal Skills, Customer Service, Project Management, Creativity, Conflict Resolution, Decision Making, Presentation Skills.

WORK EXPERIENCE

Mobile Computing Research Laboratory

Montreal, Canada

Software engineer intern

January 2021 - now

- Led the development of cutting-edge applications in a Node environment, enhancing user experiences.
- Designed and maintained websites with AngularJS, ensuring optimal website functionality.
- Deployed applications on Apache servers, guaranteeing reliable and efficient performance.
- Established integration pipelines on GitLab, Jenkins, and Kubernetes, streamlining the development process for increased efficiency.

ESEA

Montreal, Canada

Robotics and programming teacher

May 2022 - August 2022

- Transformed the learning experience for children aged 7 to 15 through engaging pseudocode activities, fostering a deeper understanding of robotics and programming principles.
- Engineered and built robots with Arduino, providing hands-on learning experiences that resonated with students.

Desjardins

Montreal, Canada

Software engineer intern

May 2022 - August 2022

- Elevated task completion rates through impactful frontend development with Angular and Bootstrap, and backend development with SpringBoot.
- Spearheaded the entire project development lifecycle and deployed applications, leveraging DevOps tools like Jenkins, Concourse, GitHub, and SonarQube.
- Optimized processing time through asynchronous request handling, resulting in tangible performance improvements.
- Implemented agile methodologies for efficient project management, contributing to overall team productivity.

PROJECT

Development of a REACT application with REST API backend in Nestjs

Montreal, Canada

4rd year integrator project

September 2023 - December 2023

- Engineered a robust application with Key Performance Indicators (KPI) for efficient gym management.
- Developed RESTful APIs using Nestjs in a Node environment for seamless integration and optimal performance.
- Orchestrated deployment on AWS Beanstalk, ensuring scalability and reliability.
- Designed, trained, and integrated deep learning models and neural networks to optimize Key Performance Indicators (KPIs), demonstrating expertise in data preprocessing, network architecture selection, and performance evaluation.

Development of an image recognition application

Montreal, Canada

Deep learning project

janvier 2023 - May 2023

- Developed Image Recognition Application: Led the design and development of an innovative image recognition application.
- Utilized TensorFlow and Flask: Employed TensorFlow for deep learning processing and Flask to create a user-friendly interface.
- Optimized Recognition Algorithms: Improved recognition accuracy and reduced processing time through algorithm optimization.
- Implemented a robust continuous integration pipeline using GitLab for efficient testing and deployment.
- Cloud Deployment on AWS: Successfully deployed the application on AWS, ensuring widespread accessibility.

Evolution of a software and creation of a mobile version on Android and IOS with kotlin

Montreal, Canada

3rd year integrator project

September 2022 - December 2022

- Collaborated with the client to analyze requirements, conceiving and designing the application architecture with a strong emphasis on quality assurance, as evidenced by the architecture document and project plan.
- Executed backend logic development using NestJs, establishing a robust foundation for software evolution.
- Conducted comprehensive testing, including unit and integration tests, and successfully deployed the application on Amazon servers.

Built a web application with NodeJs by using Angular and NestJs

Montreal, Canada

2nd year integrator project

September 2021 - December 2021

- Developed a web-based Scrabble game using Angular and Express in the Node.js environment, resulting in a polished and functional application.
- Optimized algorithms to enhance application velocity, measured by a reduction in time and space complexity.
- Implemented a GitLab pipeline for integrations and deployed the game on Amazon servers for widespread accessibility.