Yassine Moumine

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EDUCATION

University of Ottawa

Ottawa, ON

Bachelor of Applied Science Computer Engineering GPA: 3.1/4.0

Sep 2019 - Dec 2024

EXPERIENCE

Kelpie Robotics

Ottawa, ON

Software Engineer Member (Club)

Sep 2024 - Present

- Developed automation scripts in Bash/Python for ROS-based autonomous navigation system.
- Designed a C++ I2C wrapper for Linux and a TCP-based sensor system for real-time monitoring

University of Ottawa

Ottawa, ON

SecOps Developer

Sep 2024 - Dec 2024

- Streamlined incident response by 20%, by automating security workflows using Node.js, PowerShell, and MS Graph APIs within Docker/Windows servers
- Reduced resolution time for threat detection across 600,000+ users by optimizing all workflows in Excel
- Conducted daily analysis on 2,000+ security logs using Splunk queries and Microsoft Defender analytics

Canada Revenue Agency

Ottawa, ON

Software Engineer

Sep 2023 - Apr 2024

- Optimized ML models achieving 90%+ accuracy, using optimization algorithms and Azure Databricks
- Maintained an Inner-source platform using PostgreSQL, Sequelize ORM, Express, Node.js, and Angular while optimizing Kubernetes deployments on OpenShift
- Eliminated CI/CD build errors across 5 teams by optimizing Jenkins pipelines
- Improved modularity by publishing 3+ reusable Npm libraries in JFrog Artifactory

University of Ottawa

Ottawa, ON

Software Engineer

Sep 2021 - Apr 2024

- Collaborated in automating a bus service process generating \$15M+ in revenue using C# and Blazor
- Led a QA team of 4 students in regression testing while also conducting interviews for future candidates
- Launched internship app resulting in 1,000+ downloads by leading React Native front-end development
- Increased engagement by 50%, by deploying a revamped .NET app, integrating a custom event calendar
- Optimized API performance by peer-reviewing and refactoring RESTful APIs in custom PHP MVC

TECHNICAL SKILLS

Languages: C, C++, Python, Golang, Java, JavaScript, Shell, SQL, C#, TypeScript, HTML/CSS
Tools: Git, Jira, Docker, Kubernetes, Linux, Jenkins, AWS, Azure Databricks, PostgreSQL
Frameworks: Node.js, React.js, Express.js, AngularJS, JUnit, Redux, EF, .NET, Tailwind, ROS

Concepts: Distributed Systems, Multithreading, Object-Oriented Programming, DevOps, Cryptography

:: Data Structures and Algorithms, Machine Learning, Deep Learning, Cybersecurity

Projects

Rental AI Flask, Python, Next.js, Scikit-learn

- Predicted rental prices with 87% accuracy by training an Random Forest ML model on API listings

Focus-Feen - HacktheHill 2 React, TensorFlow, Tailwind, Google Cloud

- Developed a real-time AI application in 48 hr hackathon, leveraging CNN architecture, React and Cloud

Wild Fire Simulation CUDA, Freeglut, C++

- Accelerated simulation runtime on Freeglut by 3x by implementing CUDA kernel optimizations

Similarity Image Search Engine Java, Go, Prolog, Racket

- Built variants of an image search engine across 4 programming paradigms, implementing OOP in Java, concurrent processing in Go, logical reasoning in Prolog, and functional programming in Racket

Deep Learning Protein Classifier Python, Keras, TensorFlow, NumPy

- Fine-tuned hyper-parameters using GridSearchCV, outperforming baseline Machine Learning models by 15%

Affiliations