ABDULRAHMAN AWAD

Ottawa, Ontario (Open to Remote/Relocation) |abdulrahmansawad@gmail.com|Linkedin|Github|Website

EDUCATION

Bachelor of Computer Science Honours - Carleton University | 4.0 GPA   **Expected Graduation Date:** April 2026

- Persuing a specialization in Artificial Intellegence and Machine Learning
- Coursework: Data Structures & Algorithms, Object-Oriented Programming, Operating Systems, Distributed Systems, Software Engineering, Databases, Artificial Intellegence, Machine Learning, Discrete Math, Linear Algebra, Calculus

WORK EXPERIENCE

Nokia | Network Automation Software Engineer Intern   **April 2024 - Sept 2024**

- Developed a Visual Studio Code extension, Nokia Workflow Manager (WFM), which connects to a live instance of the Network Services Platform (NSP), optimizing workflow development/delivery for 1000+ Nokia network operators.
- Engineered advanced features for the extension's workflow development, including CRUD operations, validation, and execution of workflows all within the VsCode editor, utilizing seamless backend API integration.
- Implemented a caching mechanism for the Nokia WFM VsCode extension, drastically reducing existing workflow data retrieval times from 100ms to 0.0001ms.

Carleton University | Teaching Assistant - COMP 1405 Python Programming   **Sept 2023 - April 2024**

- Held weekly tutorial sessions demonstrating core computer science concepts in Python.
- Implemented office hours to help with debugging and assignment help to ensure student success in the course.
- Evaluated assignments and exams, providing comprehensive feedback to support student learning and improvement.

Nokia | Delivery Automation Software Developer Intern   **May 2023 - Sept 2023**

- Developed a script to automate the population of intents in the FSS instance, saving network administrators approximately 20 hours per network in manual labour.
- Automated DHCP operations by creating a tool that sends DHCP configurations invoked through the command line to a server through a TCP port using an external client.
- Developed a Python library that wraps the subprocess module, providing an efficient way to execute, run, and validate Linux commands and chain multiple commands together to create complex pipelines, saving time for developers.

PROJECTS

Personalized A.I Chatbot Full-Stack Application   **React | Javascript | Python**

- Created a personalized A.I chatbot web app by integrating the OpenAI API and LangChain LLM to allow the user to train the A.I chatbot by inputting personal data/notes/documents, etc.

Online Weather App   **JavaScript | Node.js | Express.js | MongoDB | API's**

- Designed a weather app website that employs encryption techniques to securely manage user accounts/passwords and utilized MongoDB to store user info. Integrated seamlessly with the OpenWeatherMap API, the application provides a platform for users to register, authenticate, and retrieve accurate and detailed weather data for any city internationally.

Multithreaded Hunter Game Simulation - C Systems Programming   **C | VirtualBox | SSH | Git | Github | Linux**

- Designed efficient data structures, optimizing runtime and memory, while incorporating mutexes to proactively address potential deadlocks and intricate multithreading challenges associated with multiple hunter object threads and ghosts.

TECHNICAL SKILLS & CERTIFICATIONS

Languages : Python, Java, C, C++, JavaScript, TypeScript, Html, CSS, Sql, NoSql

Tools : Docker, Kubernetes, Git, Gitlab, Jira, VsCode, Intellij, MongoDB, PgAdmin, PostgreSQL, Node, React, AWS

Certifications : Nokia Certified Network Routing Specialist I (NRS I) - TCP/IP | Ethernet | IP | VPN's | OSPF | BGP

Skills : Data Structures and Algorithms, Networking, API's, Scripting, Devops, CI/CD, Agile Methodologies, numerical algorithms, Software Architecture, Database Management Systems, data mining, Optimisation, AI Models