

#### Contact

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## **Education**

2019

**Secondary School Diploma** 

**Trinity College East** 

8 CXC Passes with Grade 1 English and Grade 2 Mathematics

2024

**Bachelor's In Computer Science**University of the Southern Caribbean

**Recent Certificates** 

2025

**Python Programming Certificate** University of Michigan

Python For Data Science, AI and Development

IDM

Generative Al Engineering Professional Certificate IDM

# **Expertise**

- React.js
- PostgreSQL
- Javascript
- PHP
- Node.js
- MongoDB
- Java
- Python
- LangChain
- LangenarOllama
- Ollamo
- Docker
- HuggingFace

#### Links

- in www.linkedin.com/in/joshuamelville-521a80247
- https://github.com/MelvilleJ



# Joshua Melville



### **Professional Summary**

Driven and detail-oriented Computer Science graduate with a strong foundation in algorithms, data structures, and software development. Skilled in PHP, MySQL, SSMS, HTML, Bootstrap, jQuery, AJAX, JavaScript, and Python, with experience applying Python for data science and Al. Built and deployed an Al agent locally using Ollama, LangChain, and SQL, alongside real-world experience as an IT Assistant and Junior Full Stack Developer in system optimization, web application development, and end-user support. Additional strengths in networking and virtualization provide a well-rounded perspective across infrastructure and development. Known for adaptability, problem-solving, and thriving in collaborative environments. Seeking an entry-level software development role to apply technical expertise and contribute to impactful, fast-paced projects.

## **Relevant Experience**

2025- Present

Port Authority Trinidad and Tobago | 1 Dock Road, Port of Spain

#### Junior Full Stack Developer / Data Analyst

This role consists of developing and deploying efficient, responsive systems using technologies such as PHP, MySQL, SSMS, HTML, Bootstrap, jQuery, AJAX, Restful API and JavaScript. I focus on delivering clean, reliable code and scalable solutions with an emphasis on performance and maintainability. I contribute to all stages of the development lifecycle, ensuring timely and high-quality deliverables.

2023 - 2025

NMTS I Aranguez Main Rd, San Juan

#### **IT Systems Administrator**

A fast paced work environment where my duties stretch from Database Analytics to Desk Support. With task ranging from day by day desk support to network configuration, database management design and testing, server development, deployment and management and telecom troubleshooting. Using tools such as Proxmox to develop and deploy Virtual Machines and Containers to streamline workflow and create redundancy using CEPH clusters and other Disaster Preparedness Tools.

## **Projects Spotlight**

#### Cocal Al Agent: Ollama, Langchain, Python, Sql.

Coded and developed a secure and local AI Agent with the guise of mimicing that task of a clerk. This project required me to build a dedicated server to host the Ollama instance and remotely connect to it so simulate a production deployment of the system. Using the Deepseek -r1 model as a base I developed the AI agents and tools they would use in Langchain. These tools enable the AI to directly query the Database for data entry, modification, and retrieval. Since all tools are APIs this project leaned heavily on restful API usage.

**PATT HRMS System (Phase 1):** Html5, CSS, JS, MySQL, PHP, Bootstrap Developed the phase 1 of the Port Authorities Human Resource Management System which handles all employee data ranging from attendance to document storage and leave management. This was a team project where we made full use of the Agile methodology. This project required the creation of many RESTAPIs to facilitate on request data retrievals to ensure smooth operation.

**POSINCO Lease Management System:** Html5, CSS, JS, MySQL, PHP, Bootstrap Created the core Lease Management System at POSINCO to manage all leases. This system also uses php and sql to manage the database transactions and Html5, CSS and JS were used to handle the front-end. The systems was also fitted with userroles and report generation in order to create a more streamlined workflow.