



DILUSHA MADUSHAN

Machine Learning & Full Stack Engineer

Address: Negombo, Sri Lanka, 127, Henmulla, Kochchikade, 11540
Phone: 0714627887
Email: dilushamadushan9912@gmail.com
Github: <https://github.com/Dilusha-Madushan>
Linkedin: [dilusha-madushan](https://www.linkedin.com/in/dilusha-madushan)

SUMMARY

AI & Machine Learning Engineer with expertise in building intelligent AI agents and scalable backend systems using OpenAI, AWS Bedrock, and Google Vertex AI with LangChain & LangGraph. Currently working as a Software Engineer in the IAM team at WSO2, contributing to enterprise identity and access management solutions while continuing to focus on AI-driven system design and LLM orchestration. Proficient in prompt engineering, tool integration, FastAPI, PostgreSQL, Go, React, and end-to-end ML/data pipelines. Passionate about building secure, high-accuracy, low-latency AI solutions for complex real-world problems.

SKILLS

- Python
- LangChain / LangGraph
- PostgreSQL, MySQL
- TensorFlow / Scikit-Learn
- Prompt Engineering
- Technical Problem Solving
- Project Leadership
- Research & Analysis
- Golang
- FastAPI
- Java
- Node js

WORK EXPERIENCE

- Software Engineer, WSO2 - Colombo, Sri Lanka

Sep 2024 - Present

 - Working on **IAM** (Identity and Access Management) platform development using Go, React, and Python at WSO2.
 - Developing and improving authentication, authorization, and identity-related features for enterprise applications.
- Machine Learning Engineer, CML Insights Inc. - Remotely

Sep 2024 - Feb 2026

 - **Designed AI Agents** using **LangChain & LangGraph** to extract structured data from unstructured sources via advanced tool calling and ReAct workflows.
 - Integrated Multi-Vendor LLMs (**OpenAI, AWS Bedrock, Vertex AI api services**) into production chat applications with dynamic tool routing and stateful memory management.
 - Optimized **Prompt Engineering** for deterministic, high-precision outputs.
 - Developed **multi-agent systems** for complex conversational data interaction and enhanced information extraction accuracy.
 - **Evaluate** the agent performances by building ground truth datasets and automating evaluation with help of AI.
- Machine Learning Engineer Intern, CML Insights Inc. - Remotely

Jan 2023 - Oct 2023

 - Trained as a Machine Learning & Software Engineer, working extensively with Python and Go.
 - Applied expertise in Python and Go to ongoing machine learning projects.
 - Enhanced existing ML pipelines with **Dask**, improving memory efficiency with parallel computing.

EDUCATION

BSc Eng. Hons in Computer Science & Engineering, University of Moratuwa, Sri Lanka

Jan 2020 - Jun 2024

Specialization: Data Science and Machine Learning Engineering.

- Academic Achievement: Maintained an outstanding GPA of 3.83 / 4.2.
- Key Coursework: Focused on Advanced Algorithms, Data Science, Machine Learning, Data Mining, and AI Agent Architectures.

G.C.E. Advanced Level (Physical Science Stream)

Jan 2016 - Aug 2018

Maris Stella College, Negombo

- Results: Secured 3 A's (Mathematics, Physics, Chemistry).
- Distinction: Achieved District Rank 32 in Gampaha District.

PROJECTS

NSIS Student Management System (Live) - (*SpringBoot, Java, Node.js, MySQL, AWS*)

Description: This is a currently running school student management system at Negombo South International School Network's Piliyandala branch. It includes a sub-system for displaying student personal information for parents, for which the main system works as a REST API. Involved back-end development with Spring Boot and MySQL.

Bitcoin Anomaly Analysis - (*Python, Scikit-Learn, Bitcoin*)

Description: Analyzed Bitcoin transaction data to identify illicit addresses, using labeled data from the BABD-13 dataset. Developed a machine learning solution to classify addresses based on statistical information from their transaction history.

CERTIFICATIONS

- Generative AI with Large Language Models (Coursera | Dec 2023)
- AWS Academy Data Engineering (AWS / Pearson | Oct – Dec 2023)
- Web3 and Blockchain Fundamentals (Coursera | Dec 2023)
- Data Science Challenge (Dialog Axiata & UoM | Jan – Mar 2021)

REFERENCES

Imantha Ahangama

- Machine Learning Engineering Lead, CML Insights Inc.
- Email: imantha.ahangama@gmail.com
- Tel: 071-5988079