MADHUSHANKHA DE SILVA

Computer Science and Engineering Undergraduate

Ambalangoda, Galle • +94 704424913 • madhushankhades@gmail.com

SUMMARY

Computer Science and Engineering undergraduate at the University of Moratuwa with a strong interest in AI, machine learning, and backend development. Passionate about programming, problem solving, and learning new technologies quickly. Skilled in teamwork and clear communication. Eager to contribute to innovative tech projects and grow in a dynamic work environment.

EDUCATION

B.Sc. Engineering (Hons) in Computer Science and Engineering   **Feb 2023 - Present**

University of Moratuwa, Sri Lanka
- Specialization in Data Science and Engineering.
- Current CGPA - 3.84/4.00

G.C.E. Advanced Level Examination   **Feb 2022**

Dharmasoka College, Ambalangoda
- Distinction passes in Combined Mathematics, Physics, Chemistry, English, General Knowledge and General Information Technology

VOLUNTEERING EXPERIENCE

Data Crunch Competition by CSE Codejam 2025 - Event Committee Member
Hit the Grounds by CSE 2024 - Company Coordinator
CSE Careers Day 2025 - Company Coordinator

PROJECTS

Airline Reservation System   06/2024 - 10/2024

A comprehensive airline reservation system focused on building a platform for seamless airline booking and management.

Key Contributions

Designed a well-structured database by optimizing relational schema to manage flights, bookings, and user data efficiently. Developed backend APIs with Node.js and MySQL for efficient data handling.

Technologies: MySQL, Node.js, Express.js, React.js

GitHub Repo: De-Silva-Madhushankha/Airline-Reservation-System

My Campus Home   12/2024 - 02/2024

Conceptualized and developed a platform specialized in finding apartments, boarding houses, rooms convenient to Sri Lankan universities.

Key Contributions

Designed the project roadmap, defined the system architecture, and led all phases of development from ideation to deployment. Built a responsive frontend using React and Tailwind CSS for an intuitive user experience. Developed and deployed backend APIs using Node.js, Express.js.

Technologies: MongoDB, Node.js, Express.js, React.js

GitHub Repo: De-Silva-Madhushankha/MyCampusHome

Optimal YouTube Video Publishing Time Prediction for Sri Lankan Viewer Base   Ongoing

This project aims to develop a data-driven tool that helps Sri Lankan YouTube creators determine the optimal publishing time for their content. By analyzing viewer engagement trends across common local content categories using the YouTube Data API, the tool identifies the most effective days and hours for video releases. The solution is designed to be lightweight and practical, enabling content creators to maximize reach, watch time, and audience growth.

Healthcare-Appointment-and-Management-System
04/2025 - 05/2025

A comprehensive, enterprise-grade healthcare management platform built using modern microservices architecture.

Key Contributions

System Architecture & Leadership: Designed a microservices architecture with 10+ independent services, including API Gateway, Authentication Service, Appointment Management, Health Analytics, and Blockchain Platform. Led the complete development lifecycle from conceptualization to deployment using Docker containerization.

Advanced Features: Integrated technologies including Hyperledger Fabric for blockchain-secured health records, IPFS for decentralized file storage.

Technologies: Java 21, Spring Boot 3.x, PostgreSQL, Apache Kafka, Docker, Hyperledger Fabric, IPFS

GitHub Repo: Apex-Innovations-LK/Healthcare-Appointment-and-Management-System

SKILLS

Languages
English, Sinhala, Tamil

Technical Skills

Python, JAVA, Artificial Intelligence (AI), Machine Learning, Web development, Database management, Problem Solving

Soft Skills
Communication Skills, Team Skills, Leadership and Management Skills

HONORS AND AWARDS

Dean's Honors List
1, 2 semesters.

Finalist in MoraXtreme 9.0 Competition 2024
A Competitive Programming Competition organized by the University of Moratuwa.

Finalist in Datastrom 6.0 Competition 2025
Data Science Competition organized by OCTAVE and Rotaract Club of the University of Moratuwa & University of Colombo.

Certifications

Introduction to Machine Learning - show credentials

Business Intelligence Fundamentals - show credentials

Papers

Predicting Depression with Machine Learning

Unpublished - View Paper

Predicting Music Popularity with Ensemble Regression Methods

Unpublished - View Paper

Profiles

LinkedIn - www.linkedin.com/in/madhushankha-de-silva

GitHub - github.com/De-Silva-Madhushankha

Kaggle - www.kaggle.com/madhushankhadesilva

Declaration

I hereby declare that the information mentioned above is correct to the best of my knowledge, and I take responsibility for its accuracy.