

# MADHUSHANKHA DE SILVA

## Computer Science and Engineering Undergraduate

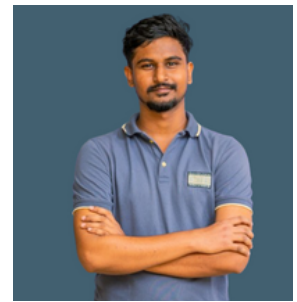
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Kaggle - [www.kaggle.com/madhushankhadesilva](https://www.kaggle.com/madhushankhadesilva)

Website - [de-silva-madhushankha.github.io](https://de-silva-madhushankha.github.io)



## 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](https://github.com/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](https://github.com/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.

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**

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### **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**

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### **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**

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**Introduction to Machine Learning** - [show credentials](#)

**Business Intelligence Fundamentals** - [show credentials](#)

## **Papers**

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### **Predicting Depression with Machine Learning**

Unpublished - [View Paper](#)

### **Predicting Music Popularity with Ensemble Regression Methods**

Unpublished - [View Paper](#)

## **References**

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### **Prof. (Ms.) Meedeniya D.A.**

Professor

Dept. of Computer Science & Engineering,  
University of Moratuwa, Sri Lanka.

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## **Declaration**

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