


Wimukthi Madushan

B.Sc. Engineering Honours
Department of Computer Science and Engineering,
University of Moratuwa

 [GitHub Profile](#)

 [LinkedIn Profile](#)

 wimukthi.21@cse.mrt.ac.lk

 [Website](#)

 [\(+94\) 740631472](tel:+94740631472)

SUMMARY

A motivated Computer Science and Engineering student with a strong interest in software engineering, artificial intelligence, and machine learning. Skilled in problem-solving and passionate about building innovative solutions. Eager to learn new technologies and seeking a software engineering role to gain hands-on experience and contribute to impactful, real-world projects.

Areas of Interest: Software Development, Front-end Development, Back-end Development, Mobile Development, Database Management, Machine Learning, Deep Learning Artificial intelligence

EXPERIENCE

Software Engineering Intern
Scienter Technologies (Pvt) Ltd

Jan 2025 – Mar 2025

- Contributed to the development of web applications using Angular, .Net frameworks and SQL.
- Participated in daily standups, code reviews, and agile sprint planning.
- Gained hands-on experience in full-stack development and software deployment practices.

EDUCATION

University of Moratuwa

Bachelor of Science (Hons) in Engineering, Computer Science and Engineering

Aug. 2022 - Present



CGPA: 3.47/4

Govt. Science College Matale

GCE Advanced Level - Physical Science Stream - 3A passes with a Z-score of 2.2875








Jan. 2015 - Aug. 2020

PROJECTS

- **Potato Disease Classification Using CNN (Deep Learning)** 2025
Developed a deep learning model using Convolutional Neural Networks (CNNs) to classify potato plant diseases from leaf images. The project involved data preprocessing, model training, evaluation, and deployment. Achieved high accuracy in detecting common potato diseases such as early blight and late blight.
Technologies: Python, Flask, FastAPI, Tensorflow, CNN, Next JS, NumPy, Matplotlib
Frontend: [GitHub](#)  **Backend:** [GitHub](#) 
- **Sanchaara (Backend)** 2025
Built a mobile application using Flutter and designed a scalable backend with Java Spring Boot. Implemented microservice architecture with asynchronous communication via Kafka, and containerized all services using Docker and Docker Compose for consistent deployment.
Role: Backend Developer – Responsible for designing and developing the entire backend system.

Technologies: Java, Spring Boot, Flutter, Kafka, Docker, MongoDB, PostgreSQL

Frontend: [GitHub](#)  **Backend:** [GitHub](#) 


- **Deep Learning Image Classifier (Deep Learning)**  **2025**
Developed an image classification system to distinguish between cats and dogs using two different approaches. The first model was trained from scratch using a custom CNN architecture, while the second leveraged transfer learning with a pre-trained model (Xception). Achieved high accuracy through data augmentation, optimization techniques, and model evaluation strategies.
Technologies: Python, Flask, Tensorflow, keras, Pandas, Deep Learning, openCV
- **Sentiment Analysis (Machine Learning)**  **2025**
This project focuses on performing sentiment analysis on textual data using classical machine learning techniques and basic Natural Language Processing (NLP). The goal is to determine whether a given text expresses a positive, negative sentiment. The model is trained on labeled text data and uses standard NLP preprocessing methods to convert raw text into machine-readable features.
Technologies: Python, NLP, Pandas, Machine Learning, Next Js, Flask, Scikit-learn
- **Laptop Price Predictor (ML)**  **2025**
A machine learning web application that predicts laptop prices based on key hardware specifications such as CPU, GPU, RAM, screen type, and more. The system includes data preprocessing, feature engineering, and model training for accurate predictions. Built with a user-friendly Flask interface, allowing users to input specs and instantly view estimated prices.
Technologies: Python, Flask, Scikit-learn, Pandas, Machine Learning
- **Microservice Deployment on AWS with CI/CD (DevOps)**  **2025**
Designed and developed a simple microservice application using Java Spring Boot. The application was containerized with Docker and deployed on an AWS EC2 instance. Integrated with a MySQL database hosted on AWS RDS, and automated the CI/CD pipeline using GitHub Actions for seamless deployment and updates.
Technologies: Java, Spring Boot, Docker, AWS EC2, AWS RDS, MySQL, GitHub Actions
Related Project: [Node.js Application Deploy on AWS with CI/CD](#)
[Node.js Application Deploy EC2 Docker and CI/CD](#)
- **Interactive Library Management System (Web and mobile)**  **2024**
Fifth semester Software Engineering project, I contributed to the development of an interactive library management system. This project involves creating web applications for efficient book management and user interaction.
Contribution: Frontend, Backend, Database, Documentation
Technologies: React, React Native, Node.js, Express, MySQL, Expo
- **Asgardeo Authentication Demonstration (Web)**  **2024**
A Netflix clone built using React, featuring Asgardio Authentication for secure user login and authentication. The project replicates core Netflix functionalities such as browsing shows, streaming content, and managing user profiles, providing a seamless and interactive user experience.
Technologies: React, Asgardio Authentication
- **Netflix Clone with Firebase Authentication (Web)**  **2024**
A Netflix clone built using React, featuring Asgardio Authentication for secure user login and authentication. The project replicates core Netflix functionalities such as browsing shows, streaming content, and managing user profiles, providing a seamless and interactive user experience.

Technologies: React, Firebase Authentication

- **Airline Reservation System**  **2024**
third semester Database Management System project, I contributed to the development of an Airline Reservation System. This project involves creating web applications for efficient Airline management and user interaction.


Contribution: Frontend, Backend, Database, Documentation

Technologies: React, Flask, MySQL

- **RPAL Interpreter**  **2024**
An interpreter for the functional programming language RPAL consisting of a lexical analyzer, parser, and a CSE machine. The interpreter can execute a given RPAL program by constructing the abstract syntax tree, standardizing the AST, and evaluating the program to get the output.

Contribution: Lexical Analyzer and Parser

Programming Language: C++

- **Nano Processor Design**  **2023**
Second semester's Computer Organization and Digital Design module, we embarked on a project to design a 4-bit nano processor. This processor was capable of performing essential operations such as addition, subtraction, left shift, right shift, and negation.

Contribution: Create Components, Combine components

Technologies: VHDL, Xilinx Vivado

CORE SKILLS

- **Web Development:** HTML, CSS, React, tailwind CSS, Node.js, Express, Next js, Angular, Spring Boot, .Net , UI Libraries(Radix UI, Ant Design, Chakra UI)
- **Mobile Development:** React Native
- **Database Management:** MySQL, MongoDB, PostgreSQL
- **Version Control:** Git, GitHub
- **Programming Languages:** C, C++, Python, Java, JavaScript, TypeScript, Python
- **Deployment:** AWS, Render, Vercel
- **Tools:** VSCode, IntelliJ IDEA, Docker, Xilinx Vivado

SOFT SKILLS

- Effective communication and teamwork skills gained through group projects and collaborations.
- Adaptability and quick learning ability in adopting new technologies and methodologies.
- Time management and organizational skills developed through balancing academic and project commitments.

- Introduction to Front-End Development (Meta) [↗](#) *Nov 2023*
- Introduction to Back-End Development (Meta) [↗](#) *Nov 2023*
- Introduction to Databases for Back-End Development (Meta) [↗](#) *Dec 2023*
- Version Control (Meta) [↗](#) *Dec 2023*
- Programming with JavaScript (Meta) [↗](#) *Jan 2024*
- Advanced React (Meta) [↗](#) *Jan 2024*

REFERENCES

Prof. (Ms) Meedeniya D.A.

Senior Lecturer

Department of Computer Science & Engineering
ing

University of Moratuwa

Sri Lanka

dulanim@cse.mrt.ac.lk

Ms. D M S M M Dissanayaka

MSc, BSc

Senior Software Engineer

Postsig Inc

San Francisco, CA

sachini@postsig.com

Dr. Kutila Gunasekera

Senior Lecturer

Department of Computer Science & Engineering

University of Moratuwa

Sri Lanka

Mobile: +94 77 1423877

kutilla@cse.mrt.ac.lk