

SAHANYA FERNANDO

sahanya-s-portfolio.vercel.app

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• [HuggingFace](#)

PROFILE

Computer Science and Engineering undergraduate at the University of Moratuwa with a passion for mathematics and programming and growing expertise in data science, machine learning and AI, specially for Natural Language Processing.

EDUCATION

Bachelor of Science in Computer Science and Engineering

2024 - Present

University of Moratuwa , Sri Lanka

- CSE Main Stream
- Undergraduate(3rd year)

G.C.E. Advanced Level Examination, Central College, Anuradhapura

2019 - 2022

- Distinctions in Combined Mathematics, Physics, Chemistry, English, and General Knowledge
 - Z-Score: 2.7200 | Island Rank: 75 | District Rank: 03
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PPROJECS

Public Responses Analysis System

This project focuses on analyzing multilingual public responses to government policies and events using Natural Language Processing (NLP).

(Tech Stack : Python, Classical NLP(NTTK, spaCy), scikit-learn, Hugging Face Transformers)

[GitHub Repo](#) | [Medium Article](#)

Supply Chain Management System

This project is semester 3 group project - a web-based application for managing a supply chain, built with React and Vite for the frontend and an Express back end. It uses a MySQL database running in a Docker container.

(Tech Stack : Docker, React, Express, MySQL)

[GitHub Repo](#)

AgriSenseNet

This project is semester 4 group project - A modern, interactive smart farm management web application built with React + Vite. The dashboard provides real-time monitoring and control across farm operations including weather, irrigation, fleet tracking, sensors, and a 3D interactive map.

(Tech Stack : React 19 - UI framework, Vite 8 - Build tool and dev server, React Router v7 - Client Side Routing, Tailwind CSS v4 - Utility First styling, Three.js - 3D rendering, ESLint - Code linting)

[GitHub Repo](#)

notion-lite

A production-style mini Notion clone. Sign up / login with Clerk, Create and manage workspaces, Rich text page editor (TipTap) with auto-save, Nested pages in a Notion-style sidebar, Tags on pages, Search by page title and tags, Share pages with view/edit permissions, Workspace RBAC: OWNER, EDITOR, VIEWER AI study-note summary generator per page

(Tech Stack : Frontend + Backend: Next.js 16 (App Router) + TypeScript, Database: PostgreSQL, ORM: Prisma, Auth: Clerk, UI: Tailwind CSS + shadcn-style components, Editor: TipTap, AI: OpenAI API, Deploy: Vercel + Neon PostgreSQL)

[GitHub Repo](#)

Axiora - AI-Powered Goal Management & Productivity Platform

Self Project - A comprehensive, production-ready web application with PWA support for managing goals, tasks, expenses, and tracking progress. Features an intelligent AI assistant with voice and text input powered by free, open-source Hugging Face models.

(Tech : Frontend: Next.js 14+ (App Router), React 18, TypeScript, Styling: Tailwind CSS, State, Management: Zustand, SWR, Database: Supabase (PostgreSQL) with Row Level Security, AI: Hugging Face Inference API (free tier), Web Speech API, Charts: Recharts, PWA: next-pwa)

[GitHub Repo](#)

RESEARCH

- Ongoing Research in the domain NLP specially for low resource languages, dataset quality estimation.
 - Ongoing Research in the domain NLP - PIXEL Language Modeling
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CERTIFICATES

- **AWS Academy Graduate - Cloud Foundations - Training Badge**
(By AWS Academy Cloud Foundations) - [Credential URL](#)
 - **Mastering NLP: Tokenization, Sentiment Analysis & Neural MT**
(By Coursera) - [Credential URL](#)
 - **Neural Models and Machine Translation**
(By Coursera) - [Credential URL](#)
 - **Advanced Tokenization and Sentiment Analysis**
(By Coursera) - [Credential URL](#)
 - **Natural Language Processing Essentials**
(By Coursera) - [Credential URL](#)
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SKILLS

- **Languages:** English (fluent), Sinhala (native)
 - **Programming Languages:** Python, C++, C, Java, SQL, TypeScript
 - **Frameworks:** React.js, Next.js, Tailwind CSS, Express.js, FastAPI, Spring Boot(Java)
 - **Database Management:** MySQL, PostgreSQL, SQLite, MongoDB, RDBMS, Docker, ChromaDB
 - **Machine Learning and AI and NLP:** Scikit-Learn, Pandas, Numpy, Matplotlib, Hugging Face Transformers, LLMs, NLTK, spaCy, PyTorch, Tensor Flow, OpenCV, YOLO, RAG
 - **Soft Skills:** Communication, Leadership skills, Critical Thinking, Problem Solving, Adaptability, Time Management
 - **DevOps & Cloud:** Git, GitHub, Docker, GitHub Actions(CI/CD), Vercel, AWS
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TEACHING EXPERIENCE

Tutor for Advanced Level Combined Mathematics

2023 - Present

- Helping Students to improve their thinking and skills
 - Marking Papers, Arranging Exams, Student Guidance, Performance Evaluation
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VOLUNTEERING EXPERIENCE & EXTRA CURRICULAR ACTIVITIES

- **CSE Student Society** - Company coordinator in 2026 career fair
- **IEEE-IAS (Industrial Applicatios Society)** in University of Moratuwa - Web master
- **IEEE-CIS (Computational Intelligence Society)** in University of Moratuwa - Design Team
- **MoraMaths** - Maths Society in University of Moratuwa
- **Sasnaka Sansadhaya** - Teaching experience in 'Ganitha Saviya National Project'