# Piyumi Weerarathna

🗣 Colombo, Sri Lanka 🔻 piyuminadeesha.22@gmail.com 📞 0763774028 🗳 nadeesha.com

in piyumi-weerarathna • piyuminadee

## PROFILE

Computer Science undergraduate at the University of Kelaniya, specializing in Data Science. Curious and analytical problem-solver with a strong foundation in software engineering and a growing passion for data-driven innovation. Actively upskilling in data science fundamentals (Python, SQL, statistical analysis) to transition into machine learning engineering. Excited to leverage programming expertise to extract insights, build predictive models, and solve realworld challenges. Highly motivated to contribute to data-centric teams while accelerating learning through hands-on experimentation and mentorship.

## **EDUCATION**

Sept 2022 – present BSc(Hons)

University of Kelaniya, Computer Science Specialization with Data Science

- GPA: 3.27/4.0
- Coursework: Computer Architecture, Software Engineering, Object Oriented Programming, Data Structures and Algorithms

Advanced Level (G.C.E) - 2020

Sri Devananda College Ambalangoda Physical Science Streem 2019 - 2020

Z-Score: 1.5811

## EXPERIENCE \_\_\_\_

**Stacknet**, Software Engineer Intern

- June 2024 Jan 2025
- Developed a restaurant web application using the MERN stack (MongoDB, Express.js, React.js, Node.js). Restaurant Demo 🗹
- Contributed to the development of a POS system using ASP.NET, improving transaction efficiency. Pos 🗹
- Implemented sales prediction models using ML.NET, enhancing business decisionmaking through data driven insights.
- Collaborated with a team in an **Agile** environment, participating in code reviews and feature development.

Rightmo, Web maintainer

Feb 2023 - June 2022

- Maintained and updated websites including maruads.lk, riahub.lk, songhub.lk, and GovDoc to ensure optimal performance.
- Managed content updates, feature enhancements to improve user experience.

## PUBLICATIONS \_

A Review of Natural Language Processing Tools for Sinhala Language

November 2024

Piyumi Weerarathna - ResearchGate

10.1109/TASC.2023.3340648 🗹

## **CERTIFICATES**

- Supervised Machine Learning authorized by Stanford University & Deeplearning. Ai offered through Coursera Credentials 🗹
- React offered by HackerRank Credentials
- Foundation of User Experience Design : authorized by Google offered through Coursera Credentials 🗹
- Introduction to Backend Development: authorized by Meta offered through Coursera Credentials 🗹
- Programming with Javascript: authorized by Meta offered through Coursera Credentials
- Python for Beginners: offered through University of Moratuwa Credentials 🗹

## PROJECTS \_

## **Movie Recommentation System**

- Developed a content-based recommendation engine using **cosine similarity** and **Scikit-learn** to suggest movies, achieving 95% relevance in user feedback.
- Integrated the TMDB API to dynamically fetch movie posters and metadata, enhancing user engagement through visual interactivity.
- Tools Used: Streamlit, Scikit-learn, Pandas, TMDB API

#### **Potato Disease Classification System**

- Developed a **deep learning** model using **TensorFlow/Keras** with 98.5% validation accuracy, implementing a **CNN** architecture to classify potato leaf images into three categories: Early Blight, Late Blight, and Healthy.
- Designed end-to-end preprocessing pipelines (resizing, normalization, data augmentation) and versioned models using automated workflows, reducing inference latency by 40% through batch optimization.
- Tools Used: Python, Tensorflow, Keras

#### **MERN Stack Hotel Reservation System**

- Developed a full-stack hotel booking platform using React, Node.js, Express, and MongoDB, featuring user authentication, hotel search/filter, and reservation management.
- Integrated **real-time availability checks**, payment processing via **Stripe API**, and dynamic dashboards for users/hotel owners to manage bookings.
- Implemented RESTful APIs for CRUD operations, **JWT authentication**, and responsive UI with **React Context API** for state management.
- Designed database schema with Mongoose, enabling efficient querying of hotel data, pricing, and user reviews.
- Tools used: MERN

## TECHNOLOGIES \_

Languages: C, Java, C#, SQL, JavaScript (React), Python

**Technologies:** .NET, Microsoft SQL Server, SpringBoot, HTML, Tailwind, Django

Data Science Machine Learning: Pandas, Numpy, Tensorflow, Scikit Learn, Seaborn, Matplotlib

Database: MySQL, PSQL, MongoDB

#### VOLUNTEERING EXPERIENCES

- Computer Science Student's Association (UOK) Member
- LEO club (UOK) PR and Marketing Coordinator (CyberShield Project) 2024
- UOK ISACA Student Group Member

movie-recommendedsystem.git **∠** 

> Potato-Disease-Classification.git 🗹

Booking-App.git 🗹