MATHURAKSHI MAHENDRARAJAH

 Mathurakshi Mahendrarajah   Mathurakshi Mahendrarajah   www.mathurakshi.com

 19 PasalMawatha,Nugegoda   pmathu2126@gmail.com

 +94-763337169

PROFILE SUMMARY

Third-year Computer Engineering undergraduate specializing in AI, ML, and Data Science. Experienced in building and deploying ML, NLP, and Deep Learning models. Seeking a six month AI/ML internship to apply technical skills to real-world solutions and contribute to innovative AI projects.

EDUCATION

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

   University of Sri Jayewardenepura

   CGPA -3.89 (Up to 4th semester)

PROJECT

COMPLAINT UNDERSTANDING – NLP (SLM + LORA)   **Dec 2025 - Ongoing**

- Building a complaint classification system using DistilBERT fine-tuned with LoRA, improving macro-F1 on domain-specific data.
- Developing a Streamlit app to demonstrate model predictions and confidence scores for new inputs.
- Focusing on data preprocessing, model fine-tuning, LoRA optimization, and evaluation metrics, gaining deep hands-on expertise.
- Tech: **Python, PyTorch, Hugging Face Transformers, LoRA, Streamlit**

PNEUMONIA DETECTION FROM CHEST X-RAYS | GITHUB | LIVEDEMO   **Nov 2025**

- Built CNN (MobileNetV2) to classify chest X-rays as Normal or Pneumonia; achieved 89% accuracy, 0.88 F1-score.
- Deployed interactive web app on Hugging Face Spaces for real-time predictions.
- Tech: **Python, TensorFlow/Keras, MobileNetV2, Flask, Hugging Face Spaces**

CUSTOMER COMPLAINT INTELLIGENCE SYSTEM | GITHUB | LIVEDEMO   **Oct 2025**

- Developed AI system to classify customer complaints and flag urgency for banking services; achieved 83% validation accuracy.
- Deployed interactive Gradio app on Hugging Face Spaces for real-time predictions.
- Tech: **Python, Pandas, scikit-learn, Logistic Regression, TF-IDF, Gradio, Hugging Face Spaces, Git**

CUSTOMER LIFETIME VALUE PREDICTION (CLV) | GITHUB | LIVEDEMO   **Aug 2025 - Sep 2025**

- Built ML pipeline to predict CLV from RFM features; compared Linear Regression and XGBoost.
- Deployed XGBoost model via Streamlit app; uncovered high-value customer segments for retention strategies.
- Tech: **Python, scikit-learn, NumPy, Pandas, Linear Regression, XGBoost, Streamlit, Git**

BANGALORE HOME PRICE PREDICTOR | GITHUB | LIVEDEMO   **Jul 2025**

- Built ML model to predict Bangalore home prices; achieved $R^2 = 0.845$, MAE ≈ 16.6 Lakhs.
- Created Flask API, integrated responsive frontend (HTML/CSS/JS), deployed on AWS EC2 for global access.
- Tech: **Python, scikit-learn, Flask, AWS EC2, JavaScript, HTML/CSS**

SKILLS

- **Programming Languages :** Python, C++, Java, HTML, CSS, JavaScript, SQL
- **Machine Learning & Deep Learning. :** Pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow/Keras, PyTorch, Neural Networks, Transformers (DistilBERT), LSTM
- **NLP & Computer Vision :** Text & Image Processing, Embeddings, Tokenization, Classification Models
- **Deployment & Tools :** Streamlit, Flask, Gradio, AWS (EC2), Hugging Face Spaces, Git & GitHub, Jupyter Notebook, Google Colab
- **Soft Skills :** Problem Solving, Team Collaboration, Fast learner, Adaptability

CERTIFICATION

- **Machine Learning Specialization** | (Andrew Ng, DeepLearning.AI, Coursera)   **Nov 2025**

ACHIEVEMENTS

- **Dean's List (All Semesters)** – Maintained First Class GPA (3.89/4.00) consistently until 4th semester
- **Winner – Idea Pulse 2025** – Secured 1st place in university-level innovation challenge
- **Top 5 Finalist – CodeQuest 2024** – Ranked among the top 5 in a competitive coding challenge

REFERENCE

Dr. UdayaWijenayake

Head of the Department,

Department of ComputerEngineering,

Faculty of Engineering.

University of SriJayewardenepura.

Email: udayaw@sjp.ac.lk

Phone: +94764655928

Dr. Randima Dinalankara

Senior Lecturer,

Department of Computer Engineering,

Faculty of Engineering

University of SriJayewardenepura

Email: randima@sjp.ac.lk

Phone: +94 77 985 0917