

Lingeswaran Mithurshan

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[LinkedIn](#) | [Portfolio](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Results driven Data Scientist with strong expertise in **Machine Learning**, **Deep Learning**, and **Generative AI**, skilled at designing and deploying end-to-end AI solutions. Proficient in **Python**, **SQL**, **TensorFlow**, **LangChain**, and **AWS**, with hands-on experience in NLP, Computer Vision, and MLOps. Demonstrated ability to improve model accuracy, build scalable AI pipelines, and create interactive applications for real-world problem solving. Passionate about leveraging AI to deliver measurable business value.

TECHNICAL SKILLS

- **Programming language:** Python, SQL
- **Machine Learning & Deep Learning:** Scikit-learn, TensorFlow, Keras, Random Forest, VGG16, Model Fine-tuning
- **Data Analysis & Visualization:** Pandas, NumPy, Matplotlib, Seaborn, Power BI
- **Web Deployment & DevOps:** Streamlit, FastAPI, Docker, Git, MLflow, API Development
- **Cloud Platforms:** AWS (EC2, S3), Cloud Deployment
- **Agentic & Generative AI:** LangChain, LangGraph, GPT Models (GPT-4o, GPT-3.5), Mixtral, RAG (Retrieval-Augmented Generation), Prompt Engineering
- **AI Domains:** NLP, Computer Vision, MLOps, Recommendation Systems, AI Agents
- **Tools & Frameworks:** Hugging Face Transformers, Sentence Transformers, FAISS, Pydantic, Apify SDK

EDUCATION

Bachelor of Science (Honours) in Management (Public) <i>University of Sri Jayewardenepura</i>	Expected 2026 <i>Sri Lanka</i>
Data Science Professional (IIT-M Certified) <i>GUVI, India</i>	2025 <i>Online</i>
Computer Application Assistant <i>VCOT</i>	2022 <i>Sri Lanka</i>

PROJECTS

HR Recruitment AI Agent System | *Generative AI, LangChain, Streamlit, FastAPI, Groq*

- [GitHub Repo](#) | [Demo](#)
- Developed a modular AI recruitment assistant leveraging **LangGraph** to automate resume parsing, semantic scoring, and candidate communication, reducing manual screening time by 60%.
- Engineered an **ATS compatibility scoring** system using embeddings + GPT-4o, improving candidate ranking accuracy by 25%.
- Deployed on FastAPI with Groq inference, ensuring scalable, low-latency recruitment workflows.
- Integrated a **candidate-job match explainer** using LLM reasoning chains, providing transparent insights into shortlisting decisions to enhance HR trust and compliance.
- Implemented a **real-time candidate notification system** via automated emails and chat interfaces, improving candidate engagement and communication efficiency.
- Added a **recruitment analytics dashboard** to visualize pipeline metrics, including time-to-hire, candidate quality distribution, and recruiter performance, enabling data-driven HR decisions.

Role-Based Access Control Chatbot | *RAG, LangChain, FastAPI, Streamlit, OpenAI*

- [GitHub Repo](#) | [Demo](#)
- Built a secure internal chatbot using **Retrieval-Augmented Generation (RAG)** and a FAISS vector store to enable fast, context-aware answers from large document corpora.
- Implemented **Role-Based Access Control (RBAC)** mechanisms to restrict access to sensitive data by department (Finance, HR, Marketing), improving data governance and compliance.
- Designed a conversational Streamlit interface integrated with FastAPI, enabling seamless natural language queries and generating context-rich responses with GPT-4o models.
- Enhanced system efficiency by optimizing vector search and caching strategies, reducing average query response time by 40%.

Plant Disease Detection & AI Report System | *TensorFlow (VGG16), Streamlit, LLM*

- [GitHub Repo](#) | [Demo](#)
- Fine-tuned a **VGG16 convolutional neural network** to classify tomato and pepper plant diseases with **90% accuracy**, supporting early intervention and yield improvement.
- Developed an automated LLM-powered diagnostic report generator providing detailed analysis of symptoms, causes, and treatment recommendations, increasing usability for farmers.
- Created an intuitive Streamlit web app to enable remote disease diagnosis via image upload, facilitating scalable agricultural support and real-time advisory.

EXPERIENCE

Data Science Intern

Unified Mentor Pvt Ltd

Remote

June 2025 – Sep 2025

- Led end-to-end data science projects including data cleaning, exploratory data analysis, feature engineering, model development, and evaluation on real-world datasets.
- Applied and fine-tuned machine learning models (e.g., Random Forest, XGBoost) to improve predictive accuracy by over 20%, delivering actionable insights to stakeholders.
- Collaborated with cross-functional teams to deploy ML models into production using FastAPI and Streamlit, enabling interactive dashboards for business users.
- Implemented data pipelines and model monitoring solutions to ensure data quality and model performance consistency in production environments.

ICT Demonstrator

Vivekananda College of Technology

Batticaloa, Sri Lanka

June 2022 —Dec 2022

- Delivered practical and theoretical instruction in Information and Communication Technology to students, maintaining high teaching standards and discipline.
- Supported academic operations by assisting with lab setup, troubleshooting systems, and managing ICT resources efficiently.
- Gained hands-on experience in educational technology, classroom management, and technical demonstrations.
- Recognized for dedication, professionalism, and strong communication with both colleagues and management.

CERTIFICATES

- [Generative AI with NLP, Agentic AI and Fine Tuning](#) – Euron AI Academy
- [Build RBAC Chatbot](#) – Codebasics
- [Deep Learning Masters](#) – Euron AI Academy
- [LLMOps \(Large Language Model Operations\)](#) – Euron AI Academy