

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

Remote
June 2025 – Sep 2025

Unified Mentor Pvt Ltd

- 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

Batticaloa, Sri Lanka
June 2022 – Dec 2022

Vivekananda College of Technology

- 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