Lakith Punsara Garusingarachchi

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📍 Galle, Sri Lanka

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○ github.com/Lakith-IIT-GB

Motivated second-year Computer Science undergraduate at the Informatics Institute of Technology, affiliated with the University of Westminster, with a strong interest in Machine Learning, Deep Learning, and Large Language Models (LLMs). Proficient in Python and experience with TensorFlow, PyTorch and Generative ai. Passionate about applying AI and Computer Vision techniques to solve real-world problems and eager to contribute to innovative AI-driven solutions.

🎓 Education

Bsc.(Hons)Computer Science,
University of Westminster,UK
2023 – 2027

Primary and secondary education,
Richmond college Galle.
03/2008 – 01/2022 | Galle, Sri Lanka

🧠 Skills

Soft skills
- Leadership
- Teamwork
- Adaptability
- Communication
- Work Ethic

Technical Skills
- Programming languages: Python, Java , Javascript,Typescript, GO,Dart
- MLF frameworks: Pytorch, Tensorflow, Langchain,Sci-kit-learn
- Backend frameworks:FastApi, Flask, Django and Springboot
- Frontend frameworks: React js , Next Js and Vue Js

🌐 Languages

Sinhala Language	● ● ● ● ●
English	● ● ● ● ○
Tamil	● ○ ○ ○ ○

🏠 Volunteering and experiences

IEEE Computer society at IIT,
Membership development lead
01/2025 – present

"CodeRally 5.0" by IEEE CS at IIT,
Marketing and delegate handling Volunteer
07/2024 – 09/2024

"Hult prize", *logistic team lead*
02/2025 – present

"WebSpire 2.0" by IEEE CS at IIT,
Program and Logistic team volunteer
01/2024 – 01/2024

"Expedition" by IEEE SBC at IIT,
"Memberships and registrations development lead"
09/2024 – 10/2024

📂 Projects

Land-Mark classification with CNN
Developed a Convolutional Neural Network (CNN) powered application to predict the location of user-supplied images by identifying landmarks. The project involved building a data processing pipeline and integrating multiple models to handle real-world image classification challenges.

AI-Powered food Recipe Chatbot
Developed a chatbot that uses computer vision and NLP to identify ingredients from a photo and suggest personalized recipes
Techs: LLama 3.2, Streamlit UI, Groq cloud

Smart Plant Care: Building a Multimodal AI Chatbot with RAG and AWS Deployment
Built an AI chatbot with text, voice, and image support, leveraging Llama 3 & 3.2, FAISS, and sentence transformers for efficient retrieval and processing. Deployed the backend on AWS with FastAPI and WebSockets for real-time interactions.

Handwritten Digit Recognition using Convolutional Neural Networks
Developed a convolutional neural network (CNN) using PyTorch to classify MNIST handwritten digits with high accuracy, implementing data preprocessing and augmentation techniques to enhance model performance and achieve benchmark accuracy comparable to state-of-the-art models
Tech stack:Pytorch, NN

Multi LLM chatbot platform, *Developed a multi-LLM chatbot platform that*
Developed a multi-LLM chatbot enabling users to access Gemma, Gemma 2, LLaMA 3, and LLaMA 2 models. Integrated voice inputs and attachment support for enhanced user interaction. Designed for seamless AI model switching and efficient multi-modal communication.
Techs: Groq colud,Nextjs,Fastapi

Project Deepseek-Ollama
Developed a DeepSeek R1-based system using Ollama with a Next.js UI, supporting multiple file types, followup questions recommendations and voice features. Integrated file attachments for enhanced interaction. Designed for seamless AI-driven communication and multi-modal data processing.
Tech stack: Ollama, Deepseek, FastAPI, Nextjs

⤸ References

Rasanjalee Rathnayake, *Lecturer*,
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Yaalini Balathasan, *Visiting Lecturer*, Informatics Institute of Technology, Colombo
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