

Ahamed Akmal Ali



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📍 Kalutara, Sri Lanka

PROFILE

I am a passionate software engineer who thrives on solving problems and building innovative solutions with a keen interest in Natural Language Processing, computer vision, and task automation. I'm a fast learner, a dedicated team player who loves breaking down challenges. When I'm not coding, you'll find me exploring new ideas, automating my to-do list, or watching mixed martial arts.

CERTIFICATES

AWS Cloud Technical Essentials —

Amazon Web Services |

Machine Learning for Natural Language

Processing — AWS Academy |

Neural Networks and Deep Learning

— *Deeplearning.ai* |

Feature Engineering — Online course,

offered by Kaggle |

Chartered Institute of Management

Accounting (CIMA) — *Certificate and*

Operational Levels |

ChatGPT Prompt Engineering for

Developers — *Online course, offered by*

Deeplearning.ai

EDUCATION

BSc Eng Hons, Computer Science and Engineering,

University of Moratuwa

07/2021 – present

- **Final year undergraduate**

D.S. Senanayake College, Cololombo 07

2011 – 2019

- G.C.E A/L 2019: 3 A Passes (Physical Science Stream) | Island Rank : 243
- G.C.E O/L 2016: 9 A Passes

PROFESSIONAL EXPERIENCE

Trainee, Software Engineering,

CodeGen Internation (Pvt) Ltd.

12/2023 – 06/2024 | Colombo, Sri Lanka

- Contributed to developing and deploying innovative software solutions across diverse domains, gaining hands-on experience in full-stack development, real-time systems, and machine learning while ensuring system scalability.

Visiting Instructor, Department of Computer Science and Engineering, University of Moratuwa

06/2024 – present

- Assisted semester 5 students in building end-to-end DSE projects and evaluated them under the supervision of Dr. Thanuja Ambegoda.
- Conducted lab sessions and Created programming Assignments for semester 2 students under the supervision of Dr. Nisansa De Silva.

Web-site developer,

Majlis-ul-Islam, University of Moratuwa

07/2023 – present

- Collaborated to design, develop, and deploy the official website for Majlis-ul-Islam ensuring smooth user experience.

PROJECTS

AccoMind - Research & Development Project

06/2024 – present

- Developed a state-of-the-art RAG system to extract actionable insights from unstructured, long-context financial data. The system is designed to serve diverse stakeholders by fine-tuning small language models using the LoRA technique with dynamic parameter loading tailored to user roles.
- **Tech stack:** Python, NLP (Transformers, LoRA), Vector Databases (Chroma/ADA-2), Docling, HuggingFace

SKILLS

Programming Languages

Python, Java, C++, JavaScript, TypeScript, SQL, Dart, Bash, Go

Machine Learning & Computer Vision

Scikit-learn, Pandas, OpenCV, Keras, YOLO, PyTorch, Supervision, Ultralytics

Data Visualization

Matplotlib, Seaborn

Databases

PostgreSQL, MySQL, MongoDB, Firestore, ChromaDB

Web & Mobile Development

SpringBoot, HTML, CSS, Flutter, React, Angular, React Native, Node.JS, Express.JS, Next.JS, Django

Development Environments & Tools

Git, Linux, Docker, PyCharm, VS Code, Postman, Swagger, GCP, AWS, GitHub Actions, Kron, HuggingFace, Vercel

PERSONAL SKILLS

Teamwork | Leadership | Adaptability | Problem Solving | Communication

INTERESTS

Full-stack Development | Computer Vision | Natural Language Processing | DevOps | Mixed Martial Arts

REFERENCES

Dr. Thanuja Ambegoda, Senior Lecturer, Department of Computer Science & Engineering, University of Moratuwa
thanuja@cse.mrt.ac.lk

Lashan Wanniarachchi, Associate Tech Lead, CodeGen International Pvt Ltd
lashan@codegen.net

Work-site Safety Compliance System

01/2024 – 05/2024

- A robust edge-based solution deployed on a CCTV system at a worksite with 1000+ workers that monitors worker activities and ensures compliance with safety regulations, providing alerts for any violations.
- **Tech stack:** Python, Computer Vision (Object Detection, Keypoint Detection), Nvidia Jetson, Websockets

Action Recognition in the Dark for CCTV

08/2023 – 11/2023

- Developed a system for action recognition in near pitch-black conditions by employing computer vision techniques to enhance the visibility of video streams and analyzing key-point displacements in adjacent frames on a CCTV system to detect suspicious behavior, ensuring improved detection accuracy in low-light environments.
- **Tech stack:** Python, Computer Vision (Deep Neural Networks, CLAHE), YOLOv8, Flask

Reservation Management System

05/2024 – 06/2024

Developed the front-end of a custom Reservation Management System to streamline and enhance the process of managing table reservations at restaurants for a leading restaurant chain in Sri Lanka.

Flutter | Dart | Flutter BLoC | Web-sockets

Employee Attrition Analysis

06/2023 – 07/2023

Conducted comprehensive data analysis and pre-processing on a complex employee dataset, leveraging Python and data science libraries. Provided valuable insights and predictive analytics, contributing to enhanced employee retention strategies.

Python | Matplotlib | Statistics | Data Analysis

CLI Email Client

06/2022 – 09/2022

An efficient and modular email client designed to perform various operations related to email management. Features included dynamic recipient management, email serialization, adding recipients, sending emails, and generating reports. Demonstrated proficiency in OOP principles and coding best practices. **Java | OOP**