

Ahamed Akmal Ali


Software Engineer



✉ akmal.20@cse.mrt.ac.lk

🐙 Akmal@github  Akmal Ali Jasmin

☎ +94771727061

📍 Kalutara, Sri Lanka  portfolio

PROFILE


I am an ambitious Software Engineer with a strong drive for solving problems and creating innovative solutions. I enjoy breaking down complex challenges and delivering impactful results. A fast learner and a dedicated team player, I thrive in collaborative environments and constantly seek opportunities to grow. When I'm not coding, I'm often exploring new ideas, indulging in my love for mixed martial arts, or sleeping.

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 International (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

HTML, CSS, SpringBoot, Django, Flutter, React, Angular, React Native, NodeJS, NextJS, ExpressJS

Development Environments & Tools

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

HIGHLIGHTS

Students' Representative, Department of Computer Science & Engineering, Semesters 4, 5, & 6

Bashaway 2023 Finalist, Scripting & Automation Competition

Secretary: Undergraduates' Association of Kalutara
2023 – 2024

Member: Gavel Club, UOM

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 Dark Video Streams [↗](#)

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 video stream 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.
- **Tech stack:** *Flutter, Dart, Flutter BLoC, Web-sockets*

Majlis-Ul-Islam Website [↗](#)

01/2024 – present

- Contributed to design, develop and deploy the official website for Majlis ul Islam, University of Moratuwa ensuring smooth user experience. Set up a pipeline to ensure continuous integration and deployment.
- **Tech stack:** *Next.JS, Contentful API, GitHub Actions, Vercel*

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.
- **Tech stack:** *Python, Matplotlib, Statistics, Data Analysis*