Ahamed Dhahlan

SUMMARY -

Experienced data scientist and machine learning engineer with a strong focus on transformers and LangChain agentic models. Skilled in developing and deploying advanced natural language processing (NLP) solutions, leveraging frameworks like PyTorch, Hugging Face Transformers, and LangChain to create intelligent, context-aware systems. Proficient in Python, R, and SQL, with hands-on experience in building end-to-end machine learning pipelines, predictive modeling, and data-driven decision-making. Adept at delivering scalable solutions that drive innovation and enhance user engagement.

EXPERIENCE -

Software Engineer Intern

Sep - Present 2024

Paralegal.lk, Colombo, Sri Lanka

- Integrated payment solutions into the website using PayHere services and React, enhancing transaction capabilities.
- Conducted network analysis of legal case citations, significantly improving the websites search engine efficiency by 200%.
- Collaborated on diverse web development tasks, emphasizing front-end functionality and optimizing user experience.

Electrical and Information Engineer Intern

August - January 2023-2024

Mahaweli Authority of Sri Lanka, Victoria, Sri Lanka

- Led the design and implementation of a cutting-edge real-time dam simulation system for the Victoria Dam Control Room and Observation Platform.
- Implemented a Dam Gate opening prediction app.

PROJECTS -

Singlish GPT: Language Model for Sinhala in English Letters

- Developed a GPT model for Singlish text processing and generation using mT5, achieving 92% accuracy in text generation.
- **Technology Used:** Python, Hugging Face Transformers, PyTorch, Aksharamukha, Google Cloud

DeChatIn: AI - Powered Chatbot for Conversational and Voice Interactions

- Developed an AI-driven chatbot with voice conversation capabilities, enabling natural interactions and seamless speech mode switching.
- Enhanced conversational dynamics with real-time speech synthesis, improving user engagement.
- **Technology Used:** Python, Streamlit, Google Gemma, Hugging Face Transformers, Google Text-to-Speech (TTS), NLP, Generative AI

CodeForgeAl: Code Generation from Webpage Screenshots

- Created a tool to generate code from webpage screenshots with real-time previews, enhancing coding efficiency.
- Technology Used: Python, Django, React, Gemini, Generative Al

EduZone: An Innovative E-learning Platform – Group Project

- Developed a comprehensive e-learning platform with courses and projects, using React (frontend) and Django (backend).
- Used Python and Django for server-side logic and database management.
- Technology Used: React, Python, Django, JWT, Machine Learning

Trading Helper Agent: A Conversational Assistant for Stock Analysis

- Built an intelligent conversational agent for stock analysis, integrating tools for fetching stock data, news, and calculating moving averages.
- Used LangChain for seamless interaction with external tools and a custom Google Gemma language model.
- Implemented dynamic query handling and real-time processing.
- **Technology Used:** Python, Hugging Face Transformers, LangChain Agent, Py-Torch, Streamlit, YFinance

Third Eye Glove for the Visually Impaired

- Developed a wearable glove using computer vision and ultrasonic sensors to detect obstacles and provide real-time feedback.
- Implemented advanced image processing techniques for object and terrain identification.
- Technology Used: Raspberry Pi, ATmega328p, Computer Vision, Image Processing, Ultrasonic Sensors, Python, OpenCV

EDUCATION —

Bachelor of Science in Engineering (Honors) – Electrical and Information 2021 – 2025 University of Ruhuna, Galle, Sri Lanka

GCE Advanced Level and GCE Ordinary Level

2017 - 2019

Zahira College, Kalmunai, Sri Lanka

SKILLS -

Programming Languages

• C, C++, Python, JavaScript

Data Science/ML Libraries

• TensorFlow, PyTorch, scikit-learn, NumPy, Pandas

Machine Learning Skills

NLP, Computer Vision, Model Training, Hyperparameter Tuning

Web Development

• HTML, CSS, JavaScript, React.js, Node.js, Django

Databases

MySQL, MongoDB

Development Tools

• Git, VSCode, Jupyter Notebook

Soft Skills

• Problem Solving, Self-Learning, Presentation, Adaptability, Critical Thinking

CERTIFICATES —

- Introduction to Web Development with HTML, CSS, JavaScript
- Introduction to Cloud Computing
- Introduction to Deep Learning & Neural Networks with Keras
- Machine Learning with Python
- Python for Data Analysis: Pandas & NumPy
- edX Verified Certificate for Data Science: Machine Learning
- SystemVerilog for ASIC/FPGA Design & Simulation

ACHIEVEMENTS —

- Participant, Commercial Bank Hackathon, June 2024
- 2nd Runners up, Haxtreme 2.0, IEEE Society, November 2023
- Top 10%, AWS Deep Racer, August 2023

REFERENCES ----

References available upon request.