Nilakshan Raveendran

AI & Machine Learning Intern — Undergraduate in Computer Science
nilaksh2001@gmail.com | +94 76696 5785 | Portfolio | LinkedIn | GitHub

Professional Summary

Aspiring **AI & Machine Learning Intern** with strong foundations in deep learning, NLP, neural networks, model training, data preprocessing, and evaluation. Experienced in implementing **Transformer-based models**, building end-to-end **ML pipelines**, and conducting experiment-driven development. Passionate about LLMs and generative AI.

Core Competencies

Machine Learning, Deep Learning, Neural Networks (ANN, CNN, RNN), Transformers, LLMs, NLP, Model Training, Hyperparameter Tuning, Attention Mechanisms, Tokenization, Embeddings, Cross-validation, Experimentation, Python Programming

Technical Skills

Programming: Python, Java, JavaScript, SQL
ML/DL: TensorFlow, PyTorch, Keras, Scikit-learn, XGBoost
AI/NLP: Transformers, BERT, GPT, Attention Models
Tools: Pandas, NumPy, Matplotlib, OpenCV, Jupyter, Docker, Git
Databases: PostgreSQL, MySQL, MongoDB

Education

Uva Wellassa University 2022 – Present
B.Sc. (Hons) in Computer Science & Technology

GPA: 3.5 (First 4 Semesters)

Projects

GPT-2 Architecture (From Scratch)

- Implemented core Transformer components including multi-head attention, masked self-attention, positional encoding, and layer normalization.
- Designed and built a complete training pipeline with custom tokenization, batching, loss computation, and Adam optimization.

Text Summarization using T5 Transformer

- Fine-tuned the T5-small model using HuggingFace Trainer for abstractive text summarization.
- Implemented full preprocessing pipeline including tokenization, padding, truncation, and attention mask generation.
- Optimized learning rate, batch size, and sequence length through controlled experimentation.

Mobile Price Prediction (ANN)

- Developed an Artificial Neural Network (ANN) classifier using TensorFlow/Keras for multi-class price prediction.
- Performed end-to-end data preprocessing including normalization, feature scaling, and train-test splitting.
- Applied hyperparameter tuning and evaluated model performance using accuracy, precision, recall, and confusion matrix.
- Integrated early stopping and learning rate scheduling to improve generalization.

SMS Spam Detection (NLP)

- Built an NLP-based text classification system using TF-IDF features with Logistic Regression, Naive Bayes, and SVM.
- Implemented text preprocessing including tokenization, stopword removal, and lemmatization.

Jarvis – AI Voice Assistant

- Developed a real-time AI voice assistant integrating speech-to-text, LLM reasoning, and text-to-speech synthesis.
- Integrated Gemini 2.0 for conversational intelligence with structured JSON-based agent routing.

- Implemented audio preprocessing including noise reduction, streaming buffers, and voice activity detection.

Experience

UI/UX Designer, Win Consult (Norway) Jan 2025 – Present

- Designed user flows and responsive interfaces for A-Z Super App (iOS & Android).
- Enhanced usability and engagement through data-driven design.

App Tester, Win Consult (A-Z App) Jan 2025 – Present

- Conducted manual & automated testing.
- Performed regression and performance testing.

Front-End Developer, Softcox Jun 2024 – Mar 2025

- Built dashboards using React and Tailwind CSS.
- Converted Figma designs into production-ready components.

Certifications

- Generative AI & ChatGPT – GeeksforGeeks
- AI/ML Engineer (Stage 1 & 2) – GeeksforGeeks
- Advanced Programming in Python – University of Moratuwa

Referee

Mr. H.P.D.P. Pathirana
Lecturer (Probationary), Department of Computer Science
Uva Wellassa University
dimuth@uwu.ac.lk