

Rivindu Ashinsa

AI/ML Engineer - Intern

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Phone: +94 752 691 645 | **Location:** Western Province, Sri Lanka

Professional Summary

Computer Science undergraduate with hands-on experience in deep learning, NLP, and computer vision. Proficient in TensorFlow, Keras, and the modern ML stack (Pandas, NumPy, Scikit-learn), with growing experience in PyTorch. Experienced in designing and training neural network architectures (CNN, LSTM, Transformers) and implementing ML models for real-world applications. Strong foundation in ML theory, statistics, and end-to-end model development from data analysis to deployment.

Technical Skills

Deep Learning Frameworks: TensorFlow, Keras, PyTorch (Learning) | Hands-on with model training and optimization

ML/DL Architectures: CNN, LSTM, Transformers, Attention Mechanisms, Neural Networks, Ensemble Methods

ML Stack & Libraries: Scikit-learn, XGBoost, Pandas, NumPy, SciPy, Matplotlib, Seaborn

Programming: Python (Production-level), SQL, R, Java | Strong algorithms & data structures foundation

ML Specializations: NLP, Computer Vision, Time-Series Analysis, Feature Engineering, Model Optimization

MLOps & Deployment: Model Training Pipelines, Hyperparameter Tuning, Git, Docker, Streamlit, REST APIs

ML Theory: Statistics, Probability, Hypothesis Testing, Regression, Classification, Optimization, Loss Functions

Experience & Projects

ML Engineer – Biomedical Signal Processing

2025 – Present

University of Westminster (CognivusLabs SDGP)

- Designed and trained CNN-LSTM hybrid architecture achieving 92% accuracy on real-time ECG anomaly detection using TensorFlow and Keras.
- Processed and analyzed 10,000+ biomedical signals, identifying patterns in time-series data and building predictive models.
- Developed time-series trend analysis model for SpO2 prediction (180s ahead) detecting increasing/dropping patterns with RMSE of 1.2%.
- Validated models on 3,000+ clinical cases achieving 94% sensitivity and 89% specificity through rigorous experimentation.
- Architected end-to-end ML pipeline processing 10,000+ signals, reducing preprocessing time by 60% through automated feature engineering and optimization.
- Collaborated with 3+ medical domain experts across 6-month project timeline to translate requirements into technical ML specifications.

NLP Engineer – RepoDigest GitHub

2025

LangGraph Application

- Built NLP application using Python, LangGraph, and Transformer models, reducing documentation time by 40% across 500+ repositories.
- Deployed natural language processing pipeline processing 500+ repositories and 50,000+ lines of code per repository.
- Applied prompt engineering and semantic analysis techniques achieving 85% accuracy in automated insight generation.
- Designed scalable data processing architecture handling 25 million+ lines of code for unstructured text extraction.

ML Engineer – Dementia Risk Prediction GitHub

2025

XPredators Research Team

- Conducted exploratory data analysis (EDA) on 5,000+ patient records to identify patterns in health indicators.
- Engineered ML pipeline using Python, scikit-learn, and TensorFlow achieving 87% accuracy through experimentation.
- Applied advanced feature engineering and dimensionality reduction (PCA) improving model performance by 12%.
- Optimized hyperparameters using GridSearchCV, balancing model complexity with production constraints.
- Integrated ensemble methods combining 5+ algorithms (Random Forest, XGBoost, Neural Networks) to maximize

predictive performance and achieve 87% accuracy.
- Applied statistical analysis to build predictive models for healthcare applications.

Education

Informatics Institute of Technology (IIT), Sri Lanka

B.Sc. (Hons) Computer Science

Sep 2024 – Jun 2027 (Expected)

Affiliated with University of Westminster, United Kingdom

Relevant Coursework: Data Science, Machine Learning, Statistics, Database Systems, Algorithms and Data Structures, Artificial Intelligence

Informatics Institute of Technology (IIT), Sri Lanka

Foundation in Information Technology

Sep 2023 – May 2024

Key Skills: Python Programming, SQL Database Management, Data Analysis, Statistical Methods

Certifications

DataCamp: Data Scientist Associate	2025
IBM CognitiveClass.ai: Data Analysis with Python, AI Fundamentals	2024
Microsoft Learn: ML Fundamentals, Azure AI	2024
Google: ML Crash Course	2024
Kaggle: ML (Intro & Intermediate), Deep Learning, Computer Vision	2024
LinkedIn Learning: MLOps, AI Foundations	2024

Honors and Awards

IntelliHack 5.0 (IEEE UCSC)	2025
- Top 10 finalist out of 350+ teams for AI-driven predictive solutions.	
DataStorm 6.0 (Rotaract UoC & UoM)	2025
- Top 10 finalist for business analytics and AI-powered solutions.	
GCE Ordinary Level Examination	2022
- Academic Excellence: 9 A grades across all subjects.	

Referees

Wathsala Dewemina

Position: Associate Information Security Engineer, TechCERT

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Thuan Pakeer

Position: Associate AI Research Assistant, CurveUp

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