

GANGULI KALUARACHCHI

Data Analyst Intern

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ABOUT ME

Final-year Data Science undergraduate focused on transforming data into actionable insights through analytics, visualization, and machine learning. Skilled in Python, Power BI, and statistical analysis for solving real-world business problems. Seeking a Data Analyst internship to apply and further develop data science and business intelligence skills.

SKILLS

Technical Skills

- **Languages:** Python, JavaScript, SQL, HTML, CSS
- **Machine Learning:** Scikit-learn, Classification Models, Feature Engineering
- **Data Engineering:** PySpark, ETL Pipelines
- **Databases:** MongoDB, MySQL
- **MLOps & DevOps:** Git, GitHub, DAGsHub
- **Mobile Development:** React Native, Expo, Flutter Framework
- **Data Analysis:** Pandas, NumPy, Matplotlib, Power BI
- **Tools:** Google Colab, Jupyter Notebook, VS Code

PROJECTS

Liyaa App - Explainable AI-Powered Conversational Mobile Health System (Ongoing) (Group Project) | [GitHub Repo](#)

Flutter, Python, XGBoost, LightGBM, SHAP, Dialogflow CX, Supabase, PostgreSQL

- Developing an AI-powered mobile health system for early postpartum depression risk detection and personalized recovery support.
- Building and comparing machine learning classification models and applying SHAP-based explainability to improve prediction transparency.
- Integrating conversational AI, cloud-based data management, personalized recommendations, and continuous monitoring in a mobile application.

SmartCare-30-Day Patient Readmission Prediction & Explainable AI (Group Project) | [GitHub Repo](#)

Python, Pandas, NumPy, Scikit-learn, XGBoost, TensorFlow/Keras, SHAP, Streamlit, Plotly

- Built a binary classification pipeline to predict 30-day hospital readmission using preprocessing, feature engineering, class-imbalance handling, and stratified train/test splitting.
- Trained and evaluated Logistic Regression, Decision Tree, Random Forest, SVM, Naive Bayes, KNN, XGBoost, deep learning, and ensemble models using Accuracy, Precision, Recall, F1 Score, and ROC-AUC.
- Applied SHAP explainability and developed a Streamlit prototype that presents patient risk predictions with interpretable factors for decision support.

SmartCrop-ANN-Based Seasonal Crop Recommendation System for Sri Lankan Farmers (Group Project) | [GitHub Repo](#)

Python, TensorFlow/Keras, LSTM, Scikit-learn, Pandas, NumPy, React, TypeScript, Vite, Flask

- Developed an end-to-end crop recommendation pipeline integrating district soil profiles, seasonal weather forecasting, and a 15-class Artificial Neural Network (ANN).
- Built a district-aware LSTM model to forecast temperature, rainfall, and humidity and integrated predictions with mapped soil N/P/K and pH features.
- Compared ANN performance with Logistic Regression, Decision Tree, and Random Forest baselines and built a farmer-friendly React interface with a Flask/Python API.

E-Commerce Big Data Analytics Pipeline (Group Project) | [GitHub Repo](#)

PySpark, Apache Spark, MongoDB Atlas, Spark SQL, Parquet

- Designed a scalable Bronze-Silver-Gold data pipeline for e-commerce analytics using PySpark and Parquet.
- Developed ETL workflows for data cleaning, transformation, feature engineering, and analytical processing.
- Performed customer, product, and sales analysis using Spark SQL and MongoDB to generate business insights.

Retail Sales Business Intelligence & Forecasting (Individual Project) | [GitHub Repo](#)

Python, Pandas, NumPy, Statsmodels, Scikit-learn, Power BI

- Analyzed 307K+ retail transactions to identify sales trends, product performance, and customer patterns.
 - Performed statistical analysis and time-series forecasting in Python to support sales planning and business decision-making.
 - Built interactive Power BI dashboards and translated analytical findings into clear business insights.
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Soft Skills

- Learning Agility - Quickly learns emerging technologies and applies them effectively
 - Analytical & Critical Thinking - Evaluates complex problems using logical, data-driven reasoning
 - Adaptability - Adapts efficiently to evolving technologies, roles, and challenges
 - Leadership & Collaboration - Motivates teams, communicates effectively, and drives shared success
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EDUCATION

Sri Lanka Technology Campus | 2023-present

BSc.(Hons) in Data Science

Current GPA 3.48

Walisinghe Harischandra Collage | 2022 (Advanced Level)

Physical Science Stream (Chemistry , Combined Mathematics, Physics)

LEADERSHIPS AND VOLUNTEERING

Vice Chairperson - IEEE WIE Student Branch Affinity Group of SLTC (Executive Committee) 2025-2026

- Guided and supported the execution of 5+ technical, outreach, and community initiatives such as WIE Day 2026, VioletGlow, BlenderOps, WiSTEM, InspiHER{Tech} V4.0.
- Mentored organizing committees and coordinated project planning with the executive committee.

Finance Deputy Head - IEEE WIE Student Branch Affinity Group of SLTC (Sub Committee) 2024-2025

- Assisted in budgeting and financial planning for IEEE WIE events and Supported resource allocation and event coordination.
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REFERENCES

- Available upon request.