

# VISHWA DARSHANA



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Colombo ,Srilanka



[Vishwa Darshana](#)



[GitHub](#)

## PROFESSIONAL SUMMARY

Enthusiastic and detail-oriented final-year Data Science undergraduate at SLTC Research University with a strong foundation in data analysis, programming, machine learning. Skilled in Python for data manipulation and visualization, with hands-on experience in web development. Proficient in Microsoft Excel, Word, and PowerPoint for effective data presentation and reporting. Adept at problem-solving and eager to apply academic knowledge to real-world challenges in data-driven environments. Seeking opportunities to contribute to innovative projects and further develop technical and analytical expertise.

## EDUCATION

### Bachelor of Science (Hons) in Data Science

SLTC Research University

2022 - 2026

- Relevant Coursework: Data Analysis, Machine Learning, Deep Learning ,Python Programming, Statistics, Data Visualization ,Data Manipulation ,Artificial Intelligence
- 4th year ( Current GPA - 3.00 ).

### G.C.E Advanced Level - Engineering Technology.

2018 - 2020

- Taxila Central College ,Horana

## TECHNICAL SKILLS

- **Programming Languages:** Python , JavaScript , SQL , R (Basic)
- **Web Development & Frameworks:** HTML, CSS, React.js (Intermediate), Flask (Advanced)
- **Machine Learning & Deep Learning:** Scikit-learn , NLTK, PyTorch/TensorFlow , ResNet50, CNN
- **Data Analysis & Visualization:** Pandas , Chart.js, Power BI , Microsoft Excel (Pivot Tables, Slicers, Logical Functions)
- **Databases:** MongoDB , MySQL
- **Other Tools:** Git & GitHub , Docker (Basic), SPSS (Basic) , Postman
- **Soft Skills:** Problem-solving, Presentation, Communication, Teamwork, GitHub Collaboration

## ACADEMIC PROJECTS

### Sri Lanka Cricket Analysis Dashboard (Final Year Project - Group)



- Built full-stack predictive analytics dashboard (React.js + Flask) for cricket player performance analysis and optimal team recommendations.
- Developed RandomForestRegressor ML model (Scikit-learn) with  $R^2$  accuracy of 0.8, predicting performance based on pitch, weather, and opposition.
- Created REST API for real-time predictions and data pipelines with Pandas.
- Implemented "Best XI" team suggestion and visualizations using Chart.js.
- **Tech Stack:** Python, Flask, React.js, Pandas, Scikit-learn, Machine Learning, REST API, Chart.js, Git

## Sentiment Analysis Web Application (Individual Project)

- Developed machine learning-based web app to classify text sentiment (positive, negative, neutral) using Flask backend and HTML/CSS frontend.
- Built complete data science pipeline: text preprocessing (cleaning, tokenization) and feature extraction via vectorization with NLTK and Pandas.
- Trained and compared 5 models (Logistic Regression, Naive Bayes, Decision Tree, Random Forest, SVM); selected Logistic Regression for best performance.
- Achieved 87.2% test accuracy, 87.5% recall, and 0.773 F1-score with final model.
- **Tech Stack:** Python, Scikit-learn, Pandas, NLTK, Flask, HTML, CSS

## AI-Powered Diet & Exercise Planner (Group Project)

- Developed full-stack app (React + Flask) for personalized diet/exercise plans from meal images.
- Implemented food recognition with ResNet50 CNN via transfer learning (PyTorch/TensorFlow).
- Built nutritional estimation (calories, protein, carbs) and integrated Grad-CAM for Explainable AI visualizations.
- Created REST API for predictions and MongoDB for data management.
- Tech Stack: Python, PyTorch/TensorFlow, Flask, MongoDB, React.js, CNN, ResNet50, Grad-CAM, XAI

## HR Analytics & Employee Retention Dashboard (Individual Project)

- Built interactive dashboard in Microsoft Excel analyzing 1,470 employee records to identify key attrition drivers.
- Performed comparative analysis revealing higher resignation rates among lower-income employees.
- Created visualizations using Pivot Charts and Slicers for filtering by Department, Gender, and Education.
- Key insights: Targeted retention needed for R&D department and low Job Satisfaction employees.
- **Tools:** Microsoft Excel (Advanced Pivot Tables, Slicers, Logical Functions), Data Visualization

## ADDITIONAL INFORMATION

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- **Extracurricular Activities:** Volunteer at University LEO Club , Rugby Team Player in University
- **Languages:** Sinhala ,English

## CERTIFICATES

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- Python for Beginners - University of Moratuwa.