

GOYUM SAMUDITHA

Aspiring Data Scientist | Data Analyst | Business Intelligence

Colombo, Sri Lanka - goyumsamuditha@gmail.com - +94 77 375 9190

<https://www.linkedin.com/in/goyum-samuditha>

<https://github.com/goyumsamuditha>

<https://goyumsamuditha.github.io/>

PROFESSIONAL SUMMARY

Data Science and Analytics professional with 3+ years of progressive experience delivering data-driven insights and BI solutions across high-availability telecom and technology environments. Skilled in Python (Pandas, NumPy, SciPy, scikit-learn), R, SQL, Power BI, and Tableau, with hands-on experience building predictive models, NLP pipelines, and executive-level dashboards. Experienced in leveraging AI tools including Claude, GitHub Copilot, and Gemini to accelerate analysis and automate workflows. Combines strong business acumen — stakeholder management, requirements elicitation, and process improvement — with end-to-end ML project delivery. Currently pursuing an MSc in Data Science at Coventry University, focused on machine learning, statistical modeling, and big data analytics.

PROJECTS

Final Year Project - Social Media Sentiment & Stock Price Impact Analysis

- Designed and executed a multi-stage NLP pipeline using Python: scraped Twitter data via the Tweepy API, performed tokenization, stemming, and stop-word removal using NLTK, and carried out sentiment classification using TextBlob.
- Collected, cleaned, and structured historical stock price data from the Colombo Stock Exchange (CSE) for time-series analysis.
- Built and compared three models (Linear Regression, Discriminant Analysis, and Random Forest) to predict stock price oscillations from Twitter sentiment; Random Forest achieved the best accuracy at 94.11% with the lowest MSE of 5.88%.
- Applied BERT for keyword extraction and TF-IDF for text vectorization, and produced data visualizations including word clouds, scatter plots, and bigram/trigram analysis to support findings.
- Delivered findings in a structured report with data visualizations, demonstrating a statistically significant short-term sentiment-price relationship.

Agentic AI Automated Trading Pipeline

- An end-to-end agentic AI pipeline for automated trading signal generation across 11 financial assets using machine learning, technical analysis, and AWS cloud infrastructure.
- The entire pipeline is deployed on AWS, operating daily via serverless triggers, with a real-time monitoring dashboard hosted on an EC2 instance.
- Orchestrated with four sequential AI agents handling technical analysis, News NLP sentiment, signal generation, and risk governance.
- 60.75% model accuracy.

Wine Chemical Profiling & Quality Analysis

- An end-to-end data mining pipeline deciphering structural patterns across 6,000+ wine chemical profiles.
- Engineered with unsupervised machine learning in R to evaluate data geometry using K-Means clustering, silhouette width optimization, and cophenetic tree linkage diagnostics.
- 11 chemical features.
- 99.2% classification accuracy and 0.768 cophenetic linkage.

Data-Driven Market Basket Analytics Pipeline

- An adaptive analytics engine designed to extract structural purchase patterns from massive e-commerce transactional logs.
- Bypasses textbook guesswork by utilizing distribution percentiles to programmatically determine a 1.71% support floor and executing an empirical confidence sweep to locate the operational "elbow" optimization zone.
- 167 optimized rules are discovered with 30.69 maximum lift.

PROFESSIONAL EXPERIENCE

Senior Business Analyst

Jan 2025 – Present

BitSize Concepts (Pvt) Ltd, Sri Lanka

- Lead end-to-end process identification and gap analysis, surfacing key operational bottlenecks and delivering quantifiable improvement recommendations across business units.
- Design and implement digital transformation workflows aligned with business controls, ensuring full traceability from requirements through to delivered outcomes via WorkHub24.
- Develop and automate analytical reports to support operational governance, KPI tracking, and executive-level performance dashboards using Power BI and Superset; conduct data analysis to measure performance.
- Spearhead real-time system monitoring and maintenance protocols, sustaining 99.9%+ service continuity and reliability across critical infrastructure.
- Contribute to WorkHub24 workflow developments, ensuring traceability from requirements to delivered outcomes.

Associate DevOps Engineer (WorkHub24)

Dec 2023 – Dec 2024

Dialog Axiata PLC - Group Technology, Sri Lanka

- Developed and maintained workflow automation processes for operational systems, improving end-to-end operational visibility by 30%+.
- Produced structured analytical reports through internal platforms, enhancing decision-making cadence and reducing report turnaround time.
- Executed incident triage and root-cause analysis to maintain platform stability, contributing to zero critical outages during the tenure.
- Delivered WorkHub24 feature developments with disciplined requirements documentation and stakeholder sign-off at every stage.

Junior ERP Function Analyst

Sep 2023 – Nov 2023

SPIL Labs - Sri Lanka

- Supported ERP operational reporting, aligning output metrics with platform performance objectives and management KPIs.
- Assisted real-time monitoring and maintenance activities, contributing directly to improved service continuity and SLA compliance.
- Collaborated cross-functionally to identify and resolve operational issues, reducing average resolution turnaround by 20%.

Network Operations & Service Assurance Intern

Nov 2022 – Sep 2023

Dialog Axiata PLC - Group Technology, Sri Lanka

- Supported 24/7 real-time system monitoring and service assurance in a live production environment handling millions of daily transactions.
- Contributed to requirements gathering and process mapping to strengthen operational workflows and reduce manual intervention.
- Generated analytical reports through internal monitoring systems, improving tracking accuracy and visibility for the operations team.

EDUCATION

- **MSc Data Science** **2025 – Present**
Coventry University, UK
Focus: Machine Learning, Statistical Modeling, Big Data Analytics, Scalable Data Products
- **Bachelor of Business Science (Hons) in Business Analytics** **2018 – 2022**
University of Moratuwa, Sri Lanka | Second Class (Lower Division)
Final Year Project: Social Media Sentiment & Stock Price Impact Analysis

CORE COMPETENCIES & SKILLS

- Data Analytics
- Statistical Analysis
- Business Analysis
- Requirements Elicitation
- Stakeholder Management
- Documentation
- Process Mapping
- Workflow Design
- Operational Optimization
- Digital Transformation Support
- Service Assurance
- Real-Time Monitoring
- Incident Triage Support
- Operational Reporting
- KPI Reporting
- Insight Communication
- Structured Problem Solving
- Root-Cause Thinking
- Continuous Improvement

TECHNICAL SKILLS

- **Programming & Analytics:** Python(Pandas, NumPy, SciPy), R, SQL, MySQL, NoSQL, PySpark
- **Machine Learning:** scikit-learn, Random Forest, NLP, Feature Engineering, BERT, Discriminant Analysis, Linear Regression.
- **Data Science:** Statistical Modeling, Regression Analysis, Sentiment Analysis, NLP, Predictive Analytics, Data Wrangling, Data Mining.
- **Big Data & Cloud:** AWS, Azure, Databricks, PySpark, CI/CD Pipelines, Serverless Pipelines.
- **NLP & Text Analytics:** NLTK, TextBlob, TF-IDF, Tweepy, Sentiment Analysis, Word Embeddings.
- **BI & Visualization:** Power BI, Tableau, Matplotlib, Seaborn, Dashboard Design.
- **Tools & IDEs:** Jupyter Notebook, PyCharm, Visual Studio/VS Code, Git
- **AI Tools:** Claude, GitHub Copilot, Gemini, ChatGPT
- **Productivity:** Microsoft Office (Word, Excel, PowerPoint)
- **Concepts:** Data Modeling, Time-Series Analysis, Feature Engineering.

CERTIFICATIONS & TRAINING

- Advanced Certificate in Data Analytics - NIBM
- Introduction to Cybersecurity – Cisco ([Digital Badge](#))
- Python Essentials – Cisco ([Digital Badge](#))
- Introduction to Data Science – Cisco ([Digital Badge](#))
- Big Data Foundations - Level 1 – IBM ([Digital Badge](#))
- Data Analysis Using Python – IBM ([Digital Badge](#))
- Introduction to IoT – CISCO ([Digital Badge](#))
- Data Visualization Using Python - IBM ([Digital Badge](#))
- Data Science Foundations - Level 1 – IBM ([Digital Badge](#))
- Data Visualization with R - IBM ([Digital Badge](#))
- Data Analytics Essentials – CISCO ([Digital Badge](#))
- Python for Data Science – IBM ([Digital Badge](#))

- Power BI Boot Camp
- Data Science & R Programming Workshop

LANGUAGES

- English - Professional Proficiency
- Sinhala - Native