

TAJIRI HATIBU ISSA BWIKA

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PROFESSIONAL SUMMARY

Data Analytics focused Computer Science student specializing in Business Analytics with hands-on experience analyzing large datasets, building machine learning models, and developing interactive dashboards. Skilled in Python, R, Machine Learning, Flask, SQL, Apache Spark, Pentaho, Tableau, and Streamlit for transforming raw data into actionable business insights. Experienced in fraud detection, customer segmentation, recommendation systems, and predictive analytics. Passionate about solving real-world business problems using data driven decision making and scalable analytics solutions.

WORK EXPERIENCE

CHISTON INSTITUTIONS

Tanzania

Email Infrastructure & Website Development

Jan 2025 - Present

- Designed and launched a custom institution email platform, enabling real-time tracking of school-related initiatives and boosting follow-up rates by 35%, thereby streamlining project management workflows.
- Developed and deployed an official school website, increasing online visibility by 60% and providing a comprehensive digital hub that improved stakeholder engagement and information dissemination across the institution.
- Configured domain routing and redirecting through Squarespace to ensure consistency throughout.
- Set up Google Search Console for indexing and performance tracking.
- Improved visibility through SEO, enabling the site to rank first on Google searches.

Freelance

Tanzania

Graphic Designer

Jun 2025 - Present

- Executed precise alignment of design outputs with client specifications, resulting in a 95% satisfaction rate and securing repeat business from key restaurant partners across the region.
- Developed and crafted over 150 custom banner designs for diverse restaurant clients in Tanzania, enhancing visual branding and attracting an average of 30% more customer foot traffic per establishment.
- Delivered outputs in alignment with customer requirements.

Social Media Marketing

Sep 2025 - Present

- Developed and launched a targeted marketing campaign for Travel Malaysia 2026, resulting in a 400% increase in website traffic within the first month and attracting over 10,000 visitors, significantly boosting brand visibility among international travelers.
- Implemented strategic content design and distribution channels that amplified outreach efforts; contributed to achieving a visitor retention rate of over 60%, enhancing long-term interest and potential conversion opportunities for tourism initiatives.

EDUCATION

INTI INTERNATIONAL UNIVERSITY

Nilai, Malaysia

Bachelor of Computer Science, Major in Business Analytics

Graduation Date: 2026

COVENTRY UNIVERSITY

Coventry, UK

Bachelor of Computer Science, Major in Business Analytics

Graduation Date: 2026

PROJECT EXPERIENCE

DATA ANALYTICS PROJECTS

Nilai, Malaysia

Crime Against Women (India): Interactive Analytics Dashboard | Python · Streamlit · Pandas · Data Visualization

Developed an interactive crime analytics dashboard analysing national crime data on women using Python and Streamlit.

Key Contributions

- Performed large scale data cleaning and preprocessing using Pandas and NumPy
- Conducted trend analysis on crime rates across states and time periods
- Built interactive dashboards with Streamlit enabling dynamic filtering and visualization
- Generated actionable insights identifying high risk regions and crime patterns
- Implemented data storytelling techniques to communicate insights effectively

Online Payment Fraud Detection System (Big Data) | Apache Spark · PySpark · MLlib

Designed a machine learning pipeline for detecting fraudulent banking transactions using real world financial datasets.

Key Contributions

- Performed feature engineering on high dimensional transactional data
- Implemented multiple ML models including Logistic Regression, Random Forest, Gradient Boosted Trees and Decision Trees
- Evaluated models using Precision, Recall, F1 Score and AUC metrics
- Achieved improved fraud detection capability through model comparison and tuning
- Simulated real time fraud detection workflows used in financial institutions

E-Commerce Data Mining & Customer Intelligence | R · SQL

Performed advanced data mining and customer analytics on large e-commerce transactional datasets to uncover purchasing patterns, customer behaviour, and revenue drivers.

Key Contributions

- Conducted customer segmentation using RFM analysis and K-Means clustering to identify high-value and high-frequency customer groups
- Performed market-basket analysis using the Apriori algorithm and association rules to identify frequently purchased product combinations
- Built churn prediction models using Logistic Regression and Random Forest to detect customers at risk of leaving
- Performed cluster analysis to classify customer groups based on purchasing behaviour and engagement patterns
- Developed a Profit and Loss analysis model to evaluate revenue drivers, customer lifetime value (CLV), and retention risks
- Produced an analytical report with data visualizations and business recommendations for targeted marketing and retention strategies

Impact

Predictive churn model achieved over 87 percent accuracy, supporting data-driven customer retention strategies.

E-Commerce Data Warehouse & ETL Pipeline | Pentaho · MySQL

Designed and implemented a full data warehousing solution for e-commerce analytics using Pentaho Data Integration and MySQL.

Key Contributions

- Architected a scalable star-schema data warehouse structure supporting OLAP queries and business intelligence reporting
- Built automated ETL pipelines using Pentaho PDI to extract, transform, and load large e-commerce transactional datasets into the warehouse environment
- Applied data cleaning, transformation, and validation processes to maintain high data integrity across the pipeline
- Optimized data workflows to improve processing efficiency and reduce transformation time for large datasets
- Produced analytical reports on sales performance, inventory movement, and customer purchasing behaviour to support management decision-making

Movie Recommendation System | Python · Machine Learning · Recommendation Systems

Built a recommendation engine for movie personalization using collaborative filtering techniques.

Key Contributions

- Implemented similarity algorithms to identify user preference patterns
- Generated personalized movie recommendations based on historical rating data
- Applied machine learning techniques for recommendation optimization
- Designed scalable recommendation logic applicable to streaming platforms

Retrieval Augmented Generation (RAG) Chatbot | Python · NLP · LLM

Developed an AI powered knowledge retrieval chatbot integrating retrieval systems with generative AI.

Key Contributions

- Built vector search pipeline for document retrieval
- Implemented semantic search for contextual query understanding
- Combined retrieval pipeline with generative language models for accurate responses
- Demonstrated applications in enterprise knowledge systems and decision support

Global Health Data Analytics Dashboard | Python · Tableau · Google Colab · EDA

Analysed a large-scale global health dataset containing over 1 million records to extract insights on health outcomes and socio-economic indicators.

Key Contributions

- Performed large-scale data cleaning and preprocessing using Python in Google Colab to prepare raw Kaggle data for analysis
- Conducted exploratory data analysis to identify relationships between healthcare indicators, economic development, and population metrics
- Designed and built interactive dashboards in Tableau to visualize global health trends, comparative country performance, and key public health KPIs
- Implemented filters and dynamic visualizations enabling stakeholders to explore patterns across regions, time periods, and demographic groups
- Delivered data-driven insights highlighting correlations between socio-economic conditions and health outcomes

Sales Forecasting Using Time-Series Modelling | Python · ARIMA · SARIMA

Developed predictive sales forecasting models using statistical time-series techniques to identify future demand patterns.

Key Contributions

- Conducted time-series analysis on historical sales datasets to identify trends, seasonality patterns, and demand fluctuations
- Implemented ARIMA and SARIMA forecasting models to generate future sales predictions
- Evaluated model performance by analysing seasonality patterns and prediction accuracy
- Determined SARIMA as the most effective model due to improved handling of seasonal variations in the dataset
- Demonstrated the role of predictive analytics in improving inventory planning and business decision making

Social Media Brand Analytics | Python · Tableau

Analysed social media engagement data to evaluate brand performance and audience interaction patterns for Fenty Beauty and Rare Beauty.

Key Contributions

- Collected and processed engagement metrics including likes, comments, shares, and follower growth across multiple social media platforms
- Conducted trend analysis to measure engagement patterns and audience interaction over time
- Performed comparative analysis to identify differences in content strategy, audience reach, and engagement effectiveness between the two brands
- Built visualizations to highlight engagement distribution, campaign impact, and audience behaviour patterns
- Delivered data-driven marketing recommendations to improve audience engagement and conversion potential

OTHER PROJECTS

Nilai, Malaysia

Movie Booking System | C++ · File Management

- Developed a fully functional movie ticket booking system in C++.
- Implemented user authentication, seat selection, and payment processing features.

Bakery Management System | Java · MySQL

- Built a bakery inventory and sales tracking system using Java and MySQL.
- Integrated database functionalities to store customer orders and inventory data.
- Enhanced operational efficiency through automated order management

ERP Animation | ERP · PowToon · ODOO

- Created animation video explainer using PowToon, video editors and sound sites to make an explainer video outlining ERP core processes. Published the final product on YouTube to support academic learning.

Research Study: Evolution of Web Development | SLR

- Reviewed the progression of web technologies from early days to current modern frameworks and AI integration.

LEADERSHIP EXPERIENCE

Code Like a Girl

Tanzania

Team Leader

Jan 2020 - Dec 2020

- Organized various training sessions, fostering a collaborative learning environment.
- Successfully led my team to Workshop Final Competition.
- Pitched and won the 5th Place.

- Managed the Data Analyst Workshop, overseeing planning, coordination, and execution.
- Organized various tech-related events and training sessions, fostering a collaborative learning environment.
- Maintained accurate records of club activities and member engagement.

SKILLS & INTERESTS

Programming & Query Languages

Python, R, SQL, PySpark, Java, C++

Data Analysis & Statistical Methods

Exploratory Data Analysis (EDA), Data Cleaning, Data Wrangling, Statistical Analysis, Hypothesis Testing, A/B Testing, Feature Engineering, Regression Analysis, Classification, Clustering, Time-Series Forecasting (ARIMA, SARIMA)

Machine Learning & AI

Scikit-learn, XGBoost, Random Forest, Logistic Regression, K-Means Clustering, SMOTE, Collaborative Filtering, Natural Language Processing (NLP), LLM APIs, LangChain, Retrieval Augmented Generation (RAG)

Data Engineering & Data Warehousing

ETL Pipeline Development, Data Warehousing, Pentaho Data Integration (PDI/Kettle), Star Schema Design, OLAP Data Models, MySQL

Big Data Technologies

Apache Spark, PySpark, MLlib, Distributed Data Processing

Business Intelligence & Data Visualization

Tableau, Power BI, Streamlit, Plotly, Matplotlib, Seaborn, Microsoft Excel (Advanced), Google Colab

Analytics & Business Strategy

Business Intelligence (BI), Customer Segmentation (RFM Analysis), Market-Basket Analysis, Churn Prediction, Customer Lifetime Value (CLV), KPI Development, Market Research, Competitor Analysis, Data Storytelling

Development & Collaboration Tools

Git, GitHub, NetBeans, VS Code, Anaconda

Design & Digital Tools

Figma, Canva, Squarespace

Digital Marketing Analytics

Search Engine Optimization (SEO), Content Optimization, Social Media Analytics, Campaign Performance Analysis, Google Search Console, Bing Webmaster Tools

Certifications & Professional Development

McKinsey Forward Program

React Native Workshop — Asia Pacific University (APU)

CMI Malaysia Forum — Asia Pacific University (APU)

Cyberjaya Conversation Summit — Kuala Lumpur Convention Centre

Multiple Data Analytics Courses — Coursera

Languages: English (Fluent), Swahili (Native), Turkish (Intermediate), Chinese (Beginner).