JACINTA WANJIRU MUKII

Data scientist & Financial engineer

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GitHub Portfolio │ LinkedIn Profile

SUMMARY

Dynamic and results-oriented professional **with a background in Data Science and Financial engineering**, seeking challenging opportunities to **leverage expertise in data analysis, machine learning, and financial modeling** to drive business success and innovation. Experienced in collecting, analyzing, and interpreting complex datasets to uncover actionable insights and forecast trends. Skilled in **developing and implementing innovative solutions to optimize financial processes, mitigate risks, and maximize returns on investment.**

WORK EXPERIENCE

Data Scientist │Elevolt Limited│ Nairobi, Kenya.   **Sep 2023 - July 2024**

- **Trend Analysis**: Analyzed job market data to identify emerging trends, such as in-demand skills, hiring cycles, and industry growth areas, so as to enable the company to adjust sourcing strategies and increasing the placement success by 20%.
- **Candidate and Client Insights**: Improved candidate matching accuracy by analyzing data on candidate experience and skills, leading to a 10% increase in client satisfaction.
- **Reporting:** Created dashboards using Tableau and Python visualization packages and reports for management, highlighting areas for improvement, and supporting decision-making with data-driven insights.

Accounting & Auditing Assistant │ Mbaya & Associates │ Nairobi, Kenya.   **Oct 2021 - Oct 2022**

- **Ensured Accurate Payroll Processing for various clients:** Accurately processed payrolls by calculating employee wages, deductions, and benefits, ensuring that all employees were paid correctly and on time and thus improving payroll processing efficiency by 20% for clients.
- **Ensured Accuracy of Financial Records:** By ensuring that all transactions were accurately recorded in the general ledger for the companies that we audited so as to prepare audit reports that accurately reflect the company's financial status and compliance.
- **Identified Financial Discrepancies**: Through uncovering discrepancies or irregularities in financial records, allowing the company to address issues before they escalated.
- **Facilitated Financial Reporting:** By preparing and organizing essential financial data, contributing to the creation of financial statements, balance sheets, and other reports that helped management make informed decisions.
- **Accurately recorded financial transactions**, including invoices, payments, and expenses, ensuring all data was entered correctly into the accounting system using ERP software such as QuickBooks, Microsoft Dynamics Navision.

Financial engineer attaché │ Njemuwa Ltd. │ Nairobi Kenya   **Jan 2021 - Oct 2021**

- **Conducted portfolio optimization** by assessing risk-return profiles of various assets and recommending adjustments to maximize returns.
- **Performed quantitative risk assessments** for real estate projects, identifying potential risks associated with commercial real estate transactions.
- **Developed key performance indicators**, monitored financial performance of real estate assets, and prepared quantitative presentations for stakeholders.

EDUCATION

Professional Data Science Certification   **Apr 2023 - Nov 2023**

Moringa School │ Nairobi, Kenya.
- Professional application of Data analysis & Visualization and Machine Learning.

Skills: Data analysis & engineering - Python & R│ Web Development basics – HTML and CSS │ Database management - NoSQL, MySQL │ Version Control - Git │ API Integration │ Data visualization - Tableau, Seaborn, matplotlib. │ Business Understanding │ Data modeling │ Data interpretation

Professional Financial Modeling & Valuation Analysis Certification   **Sep 2022 - Dec 2022**

Corporate Finance Institute │ ALX
Skills: Business Valuation modeling I & II│ Financial Analysis│ Budgeting and forecasting│ Accounting principles│ Advanced Excel

Bachelor of Science in Financial engineering   **Sep 2017 - June 2022**

Jomo Kenyatta University of Agriculture and Technology │ Kiambu, Kenya.
Financial Engineering is a multidisciplinary field that applies **Economics, Statistics, Applied mathematics, Computer programming, Accounting** to solve problems in **finance**.

PROJECTS

- **Swahili Audio prediction program (Automatic Speech Recognition, ASR, project)**
Developed an automated system for converting basic Swahili audio files into written text using speech recognition technology.
- **Real-Estate Market Trends (Time series prediction)**
Leveraged time series modeling by providing consultancy for a real-estate investment firm with actionable insights and forecasts pertaining to real estate price dynamics in various zip codes in USA.

- **Machine-Learning approach for informed public health intervention (logistic regression, XGBoost)**
Predicted the likelihood of individuals receiving their seasonal flu vaccines to help in understanding flu vaccine hesitancy so at to help design effective interventions.
- **Predictive Modelling for home renovations (Simple & multiple linear regressions)**
Offered homeowners expert guidance on leveraging home renovations to enhance the estimated value of their properties.
- **Analyzing film industry data (Exploratory data analysis)**
Used data from (box-office, rotten tomatoes, IMDB etc.), to strategize and advise on exploring the movie studio industry.
- **Portfolio Optimization program (R programming)**
Constructed an optimal portfolio of stocks listed in the Nairobi Securities Exchange (NSE) during Covid – 19 pandemic.

SKILLS & INTERESTS

Programming Languages: Python, R │ **Web development:** HTML, CSS │ **Data Analysis & Visualization:** Tableau, Python Packages (pandas, seaborn, matplotlib} │ **Machine Learning:** NLP, time series, regression, classification │ **Database Management:** NoSQL, MySQL, SQL │ **Version Control:** Git, GitHub │ **Financial Analysis:** Business Valuation, Financial Modeling, Budgeting, Forecasting │ **Software:** Microsoft Dynamics Navision, QuickBooks, Advanced Excel