# **Natasha Bernard**

natbernard15@gmail.com +254 707 156 064 Nairobi, Kenya

#### **Profile**

Dedicated and results-oriented machine learning engineer with a proven track record of designing and implementing cutting-edge solutions. Proficient in Python and SQL, with strong expertise in data analysis and machine learning fundamentals, and a passion for continuous learning. My experience includes working on real-world projects such as credit scoring models, price forecasting models, and extensive data clean-up, which have honed my skills and allowed me to make a meaningful impact.

#### **Skills**

Python, SQL, Machine Learning, Apache Spark, Apache Airflow, BigQuery, Dataform, Deep Learning, Statistics, Natural Language Processing, Time Series, Data Analysis, Data Visualization, Looker Studio, Microsoft Azure, MS Office Software, Critical Thinking, Effective communication, Team player

#### **Projects**

#### **Credit Scoring Model**

- Developed a credit scoring model to assess the creditworthiness of agro-dealers and facilitate financing for incoming inventory. The model achieved an accuracy of approximately 87%.
- Since rolling out, the model has not experienced any defaults, showcasing its effectiveness in minimizing financial risk.

#### **Price Forecasting Model**

- Designed a price forecasting model to predict market trends and set optimal product prices.
- Implemented the model to proactively respond to price fluctuation, optimizing revenue collection by staying ahead of market shifts.
- Enhanced the company's pricing strategies, resulting in improved profitability and reduced financial losses due to reactive pricing adjustments.

#### **Credit Card Fraud Detection**

- Developed a fraud detection model using machine learning and PCA-transformed data.
- Implemented data balancing techniques and applied various classification models to identify fraudulent activity.

#### **Experience**

## **Machine Learning Engineer**

iProcure Limited • Nairobi

03/2023 - Present

- Developed and maintained machine learning algorithms utilizing iProcure's data, enhancing company operations and resulting in revenue growth.
- Managed algorithms for various company projects within predictive modeling environments, continuously optimizing model performance across diverse applications.
- Extracted, transformed, and loaded data from iProcure's data systems and proactively managed data requests and queries to ensure timely access to critical information for various departments, significantly improving decision—making.

### **Junior Data Scientist**

- Extracted data, built predictive models, and found solutions for business problems as part of the data science framework.
- Worked with data in various ICL projects to build and deploy machine learning models.
- Performed data extraction, data mining, data visualization, and predictive modeling using scripting languages such as Python and SQL as required in various ICL projects.

#### **Education**

#### **Bachelor of Economics and Statistics**

The University of Nairobi • Nairobi

12/2022

• Graduated with Second Class Honours Upper Division.

# Kenya Certificate of Secondary Education

The Kenya High School • Nairobi

12/2016

• Completed my high school education in 2016 at the Kenya High School with an A-.

#### **Certificates / Activities**

#### Udacity

• Completed the "Machine Learning on AWS" course, gaining a solid foundation in machine learning concepts and practices using Amazon Web Services (AWS). Additionally, delved into data engineering principles, covering areas such as database management, data pipeline orchestration, and big data technologies.

#### **DataCamp**

• Acquired a comprehensive set of data skills, including data manipulation, data visualization, supervised and unsupervised machine learning techniques, feature engineering, Python programming fundamentals, sentiment analysis, and natural language processing (NLP).

#### **Udemy & Python Profits**

• Developed a strong understanding of Python programming fundamentals and machine learning model training. The knowledge gained from these courses serves as a solid base for further exploration and application of Python and machine learning in data-related projects.

#### **Organizations**

#### Zindi

• Collaborating with professionals in the field of Data Science to democratize tech in Kenya and come up with solutions for African problems.

#### **Google Developer Students Club**

• Learning Data Science with other like-minded individuals and collaborating on solving problems using data and machine learning algorithms.

#### Languages

English, Kiswahili

#### References

#### Dr. Nelly Nyaga

Health Data Science Lead IntelliSOFT Consulting Ltd.

nnyaga@intellisoftkenya.com Tel:0707 962 889

# James Kingara

Data Lead iProcure Limited james.kingara@iprocu.re Tel:0722 102 668

# Links

GitHub: github.com/natbernard, LinkedIn: linkedin.com/in/natasha-bernard, Portfolio: natbernard.github.io/