

Applicant for MS in Data Analytics

address

phone | e-mail | <https://github.com/applicant/> LinkedIn

EDUCATION

University of Nairobi, Nairobi, Kenya
B.S. in Actuarial Science

2017

TECHNICAL SKILLS

Scripting Languages: Python

Visualization Tools: Tableau, PowerBI, R Shiny, R Library (ggplot), Python Libraries (Matplotlib, Seaborn, Bokeh)

Statistical Tools: R, Microsoft Excel, SAS

Operating Systems: Windows, Mac OS, Linux

PROFESSIONAL COMPETENCIES

- Querying relational and non-relational databases in SQLite, MySQL and Mongo DB
- Training and performance-tuning machine learning and Ensemble learning models such as Random Forests, Bagging using libraries such as Tensorflow, Scikit-learn, Pandas, Numpy in Python and Arules, Class, H2O and Caret in R
- Using Natural Language Processing methodologies to extract key features from unstructured data using Python Libraries such as CoreNLP, NLTK and Spacy and build subsequent machine learning models
- Applying knowledge of Hadoop architecture, Hadoop Concepts (YARN, MapReduce, etc.) HDFS commands in designing and optimizing queries to build data pipelines.
- Creating data visualization dashboards in Tableau, PowerBI and R Shiny
- Time series forecasting on time series data (ARIMA models, exponential smoothing models, decomposition models, judgmental forecasting methods, hierarchical forecasting and neural network models)
- Hypothesis testing, A/B Testing, permutation testing, and Multi-Arm Bandit algorithm optimization procedures

PROFESSIONAL EXPERIENCE

Actuarial Analyst, **Jubilee Insurance Company**, Nairobi, Kenya

Sep 2017 - Dec 2018

- Prepared monthly actuarial valuations including analysis of reserves and surplus
- Assisted in product development work including modeling, profit and sensitivity testing
- Aided regulatory reporting of risk-based capital and other quarterly returns, actuarial valuation, and financial reports

ACADEMIC PROJECTS

Detection and Classification of Toxic and Non-Toxic Comments in Social Media Feeds

- Used Naives Bayes Classifier with 95 percent model accuracy to help in the detection and flagging of vulgar and inflammatory posts on social media platforms

Associative Rule Mining in Retail Data from UCI Machine Learning Repository

- Unearthed patterns in products purchased together frequently using Arules package in R to identify which products need to be marketed together and help retailers strategically place frequently bought items together

PROFESSIONAL ASSOCIATIONS

- Chartered Insurance Institute, Associate Member and Faculty
- University of Nairobi Alumni Association, Bronze Member

SERVICE AND LEADERSHIP

Chairperson of Community Service, **St. Paul's Catholic Chapel**, University of Nairobi, Kenya

- Engaged in charitable work at children's homes, prisons, and other places serving marginalized populations