#### EXPERIENCE

#### **ELEVANCE HEALTH (ANTHEM), ATLANTA, GA**

Senior Business Information Developer Consultant – Data Scientist, Jan. 2023 - Present As a Business Information Developer Consultant Senior - Data Scientist, I lead the development and implementation of predictive modeling algorithms to find patterns and trends for the Payment Integrity Incentives Program.

#### Responsibilities:

- Extract and manipulate large data sets using SQL programming languages.
- Develop analytic solutions or base queries using Teradata SQL Assistant, SAS, and Hive against healthcare data warehouse.
- Develop predictive models for theorizing and forecasting using R and Python.
- Create advanced machine learning algorithms and statistical techniques such as regression, simulation, scenario analysis, modeling, clustering, decision trees, neural networks, and properties of distributions.
- Monitor project schedules and costs, conduct training on developed applications, and focus on programming design solutions.

#### Senior Business Improvement Consultant, August 2022 - Jan, 2023

As a Senior Business Improvement Consultant, I led and implemented various business improvement initiatives that enhanced the effectiveness and profitability of the organization.

## Responsibilities:

- Coach project teams on the use of new analytical processes and report templates that I implemented.
- Collaborate with regional processes improvement initiatives, such as Six Sigma and TQM, to leverage joint initiatives, eliminate duplication, and ensure alignment with business improvement and innovation value across the enterprise.
- Establish and monitor metrics and measurements and teach managers to use those tools to manage their environment and hold improvement gains.
- Proactively identify opportunities for improvement by researching, developing, and implementing related best practices and control assessments.
- Find automation opportunities for repetitive and time-consuming reporting processes.
- Create automated data validation processes to improve the quality of reporting for business units.

#### BANK OF AMERICA, ATLANTA, GA

Senior Data Scientist, Feb 2022 - Present

As a Senior Data Scientist, I led a team to develop demand forecasting models for the Data Center's Virtual Machines.

#### Responsibilities:

- Built LSTM and ARIMA forecasting models to project users on virtual machines to help the business plan resource allocation and budgets.
- Managed stakeholder weekly engagements and presentations, Jira story management, distribution, and communication.
- Formulated, suggested, and managed data-driven projects to further the business's strategic interests.
- Collated and cleaned data from various sources for later use by the modeling team.
- Selected and employed advanced statistical procedures to obtain actionable insights.
- Cross-validated models to ensure their generalizability.
- Produced and disseminated non-technical reports that detail the successes and limitations of each project.
- Suggested ways in which insights might be used to inform business strategies.
- Engaged with key stakeholders to gather requirements and develop data science use cases and projects for execution.
- Created a strategic vision for the business's digitalization and automation roadmap.

### SOUTHERN COMPANY GAS, ATLANTA, GA

Senior Data Scientist, Nov 2020 - Feb 2022

As a Senior Data Scientist, I built a gradient-boosted tree model to predict customers likely to default their payment arrangements, guiding the business on best practices and determining KPIs for the EDGE Platform, which is an Insights as a Service (laaS) platform that business leaders use.

#### Responsibilities:

- Built a clustering model for customers who default to understand their characteristics.
- Built KPIs that were part of the EDGE Platform (an Insights-as-a-Service (laaS) initiative that I
  was part of from its inception).
- Guided other Data Scientists, Developers, and Analysts, ensuring that we established best practices for the team.
- Built a demand forecasting model for the Customer Call Center and another forecasting model
  with regression to establish the expected number of customers who will default payment
  arrangements in any given time frame.
- Oversaw quality assurance for the customer data migration exercise from SQL to Data Bricks, ensuring that in my UAT activities, I confirmed migration is successful and met business requirements.
- Built a churn prediction model for the Customer Call Center to identify customers likely to discontinue their service, enabling the company to take proactive measures to retain them.
- Conducted data exploration, cleaning, and preprocessing to prepare data for modeling.
- Developed and maintained data pipelines to ensure data quality and consistency.
- Conducted statistical analyses and machine learning modeling to generate insights and predictions.
- Communicated findings and recommendations to business stakeholders in clear, non-technical language.
- Participated in Agile development sprints and collaborated with cross-functional teams to implement data-driven solutions.
- Led the implementation of automated reporting and dashboarding, reducing reporting time by 50% and improving data accuracy.
- Identified and advocated for new data sources and technologies to improve modeling accuracy and efficiency.

Conducted regular training sessions for the team on new tools and technologies.

#### MCGRAW HILL, ATLANTA, GA

Senior Data Scientist, Feb 2019 - Nov 2020

As a Senior Data Scientist, I led a team of 13 analysts and data scientists to enhance their analytical skills and implemented various data pre-processing techniques to prepare data for analysis and modeling. Built a Latent Dirichlet Allocation model for topic modeling and a Sentiment Analysis model.

#### Responsibilities:

- Developed and monitored KPIs to ensure that business goals were being met.
- Analyzed sentiment in book review data using topic modeling algorithms to extract the 20 most important topics to help marketing and sales departments develop targeted user experience initiatives.
- Built a Latent Dirichlet Allocation (LDA) model to extract topics and sub-segment text data, and set up an NLP pre-processing pipeline for long-form text.
- Mentored team members to ensure that they met their professional development goals.

#### **BP, ANGOLA**

Information and Data Specialist, Jun 2011 - Jan 2019

As a Document Controller, Information and Data Specialist, and later an Information and Data Management Team Lead, I built machine learning algorithms to solve various drilling problems and gathered engineering and business-critical insights. I was a team leader for the IDM team and led many initiatives aimed at standardizing data management processing throughout the data life cycle and was the SPO and SPA for information and data management for BP's GWO teams in New Venture regions, Angola, and Egypt.

#### Responsibilities:

- Extracted data from well-logging systems to build machine learning algorithms to solve various drilling problems and gathered engineering and business-critical insights.
- Used Logistic Regression to predict deviations at any given well depth in a drilling operation and XGBoost with IoT data to predict Torque and Drag to minimize well casing and formation damage.
- Used NLP to do sentiment analysis and LDA to generate topics from the sentiment categories.
- Built various forecasting models to forecast demand for maintenance spares required for the warehouse and other forecasting tasks for other teams in the business.
- Processed huge datasets for data association pairing and provided insights into meaningful data association and trends.
- Provided ad-hoc information and data analytics support and services relating to both unstructured and structured data working across all business teams.
- Developed and maintained processes, policies, procedures, and supporting tools for information and data control.
- Helped develop KPIs across different business functions and engaged with various business stakeholders to become an SME for the business's digitalization efforts.

#### **POVERTY ACTION LAB / J-PAL**

Research Associate, Feb 2008 - May 2011

As a Research Associate, I coordinated randomized controlled trials aimed at establishing and measuring the impact of government policies on their intended beneficiaries in Zambia. I oversaw the data entry team and ensured quality data.

#### Responsibilities:

- Developed data entry forms and rules in Stata and supervised the National Data Entry team.
- Performed data quality checks, preliminary data analyses, and reporting before passing on the data to the Principal Investigator.
- Collected and logged experimental data and managed the data entry team.
- Used SPSS to do data visualizations and descriptive statistical analysis.
- Ensured that research and experiments were conducted in accordance with established protocols and made decisions on what to do if research subjects violated such protocols.
- Created presentation slides and posters to help principal researchers present findings.
- Conducted research in Zambia and other developing countries.

#### EDUCATION

CAPELLA UNIVERSITY
MINNEAPOLIS, MN
Doctor of Business Administration in Strategy and Innovation
(Exp. December 2023)

UNIVERSITY OF BRIGHTON BRIGHTON, EAST SUSSEX Master of Science Data Analytics (Feb 2019)

UNIVERSITY OF ZAMBIA LUSAKA Bachelor of Library and Information Science (May 2010)

# ADDITIONAL SKILLS

| Programming<br>Languages      | Python, R, SQL, SAS, PySpark   |
|-------------------------------|--|
| Data Stores                   | SQL, Azure Databricks  |
| Machine Learning Applications | Classification, pattern recognition, regression, prediction, dimensionality reduction, recommender systems, targeting systems, rankingsystems. Support Vector Machine, Decision Trees, Random Forest, Gradient Boosting Machine (GBM), KNN, Naïve Bayes, Clustering, Text Mining for Natural Language Processing, Spark ML, Deep Neural Networks, Convolutional Neural Networks  |
| Analytical Methods            | Advanced Data Modelling, Forecasting time series Models, Regression Analysis, Predictive Analytics, Statistical Analysis (ANOVA, correlation analysis, t-tests and z-test, descriptive statistics), Sentiment Analysis, Exploratory Data Analysis, Capital/Project Justification and Budgeting, Machine Time to Failure Analysis. Predictive Modelling with Time Series (AR, MA, and ARIMA) and Facebook Prophet, Principal Component Analysis (PCA) and Linear Discriminant Analysis; Bayesian Analysis, Linear/Logistic Regression, Classification and Regression Trees (CART) |
| Python Libraries              | NLTK, Matplotlib, NumPy, Pandas, Scikit-Learn, Keras, statsmodels, Scipy, TensorFlow, PyTorch, CNTK, Deeplearning4J, ggplot2   |
| IDEs                          | Jupyter Notebook, Spyder, Google Colab Notebook, R Studio, SAS Studio, Databricks Notebooks  |
| Data Visualizations           | Plotly Dash, Qlickview, R, Excel Dashboards, PowerBl   |
| Presentations                 | Proven capabilities to present technical findings to non-technical audiences, and with top management engagements.   |
| Project Management            | Agile, JIRA  |
| Software Tools                | SAP, Excel, PowerPoint, Word, SPSS, Landmark Drilling Software, Maximo, SharePoint, Exlibris Alma, JIRA  |
| Leadership                    | Stakeholder engagements, effective processes implementation, team building, strategy and innovation management, change management, quality management systems, create data science use cases to enhance business processes.  |

## CERTIFICATIONS

ISO 9001 Quality Management Systems

LANGUAGES

English (Native or Bilingual Proficiency)
Portuguese

+ 13 African languages