(507)321-0291
Durham, North Carolina
marlyne.hakizimana@duke.edu

Marlyne Hakizimana

GitHub: marlhakizi
LinkedIn: marlyne-hakizimana

Education

Master of Science, Interdisciplinary Data Science, *Duke University*, Cum GPA: 4.0 **May 2023**
Relevant Courserwork: Natural Language Processing, Data Engineering, Statistical Modeling and Representation of Data

Bachelor of Arts in Mathematics & Physics, *St. Olaf College* **May 2018**

Technical Skills

Tools and Languages	Python, Git, LaTeX, Heroku, Flask, GCP, AWS (Lambda, S3, Athena, Comprehend, SageMaker)
Quantitative Research	Mathematical optimization, Mathematical Modeling, R, MySQL
Communication	English, French and Kiswahili

Professional Experience

Regulatory Data Specialist Team Lead **Feb 2019 - June 2021**
Servicing 3M, Pace Analytical Services *Minneapolis, MN*

- Reviewed global chemical regulations, determined their application for various products, and effectively communicated with 3M suppliers.
- Delegated workload to a team of 20 Regulatory Data Specialists, and actively participated in client meetings.
- Automated a better workflow process using Python for efficiency and better time management.

Data Scientist Mentee **Feb 2019 - Dec 2020**
SharpestMinds *Minneapolis, MN*

- Predicted employee absenteeism in hours for a courier company using Random Forest and Logistic Regression as classification models in Python.
- Created a web app using Heroku and Flask to predict the click-through rate on an advertisement.

Projects

HackDuke Hackathon **Oct 2021**
Duke University

- Collaborated with 2 student to develop an end-to-end cloud computing application that helps Duke Dining restaurants reduce their food waste and contribute to Duke's 2025 carbon neutrality goal.
- Built and deployed our solution using Cloud build to display dashboard analytics.

Sentiment Analysis on real and synthetic data **Sept 2021**
Duke University

- Generated synthetic review data using Naive Bayes and used it to test model accuracy between Naive Bayes and LSTM with Python.
- Classified real amazon reviews and compared accuracy between Naive Bayes and LSTM.

Impact of job training on workers **Nov 2021**
Duke University

- Quantified the effect of job training on annual earnings between workers who participated in the training and the control group using linear regression.
- Applied logistic regression to calculate the odds of having positive wages depending on whether a worker participated in job training or not.

Research Experience

Student Researcher **Sept - Dec 2017**
St. Olaf College

- Worked with a team of three on a group theory mathematical research involving metacyclic groups and their multiple consequences by formulating and proving new theorems based on our findings.
- Coded using GAP to solve harder simulations that enable a convenient path for proving conjectures.

Certification

Deep Learning Specialization, *Coursera* **June 2021**
Machine Learning, *Coursera* **Dec 2019**