MARLYNE HAKIZIMANA

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EDUCATION

Duke University, Master in Interdisciplinary Data Science ***Durham, NC - May 2023***

St. Olaf College, Bachelor of Arts in Physics and Mathematics ***Northfield, MN - May 2018***

TECHNICAL SKILLS

- **Technical:** Python, R, SQL, Heroku, Flask, Mathematica, Latex, GAP, Labview, Mathcad, Excel

PROFESSIONAL EXPERIENCE

Regulatory Data Specialist Team Lead, Servicing 3M, Pace Analytical Services ***February 2019- Jun 2021***

- Reviewed global chemical regulations, determined their application for various products and effectively communicated with 3M suppliers.
- Responsible for delegating workload to a team of Regulatory Data Specialists, including the mass workload for SAP implementation.
- Automated a better workflow process using Python for efficiency and better time management.

Data Scientist Mentee, SharpestMinds ***February 2019- Dec 2020***

- 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.

Quality Audit Specialist, Prime Therapeutics ***June 2018- January 2019***

- Performed quality reviews and analyzed errors in order to deliver the highest quality services to Prime's clients.
- Collaborated with QA team members in executing application testing and saved Prime Therapeutics $500.000 by a 50% improved automation in Excel.

Data Science Consultant Intern, WindLogics ***January 2018***

- Worked with a team of five on an optimization problem where the goal was to develop a better load forecasting algorithm.
- Applied different load forecasting algorithms such as Random Forest and ARIMA in R-studio to predict seasonality in Battery control.
- Developed a 20% improved ensemble model by combining five algorithms for optimized results and better accuracy.

RESEARCH EXPERIENCE

Student Researcher, Directed Undergraduate Research, St. Olaf College (Advisor: Jill Dietz) ***September- December 2017***

- 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.

Researcher Assistant, Collaborative Undergraduate Research, St. Olaf College (Advisor: Bruce Pell) ***May- August 2017***

- Created a mathematical model implementing biological mechanism of oncolytical virotherapy to better understand the efficiency of some treatments over others.
- Applied principles of delay differential equations and derived theorems to support our model.

CERTIFICATION

- **Machine Learning,** Coursera ***December 2019***
- **Deep Learning Specialization,** Coursera ***June 2021***

LANGUAGE

English (Professional), French (Native), Kirundi (Native), Kiswahili (Basic understanding)