EDUCATION

Master of Science, Interdisciplinary Data Science, Duke University, Cum GPA: 4.0

May 2023 Relevant Coursework: Natural Language Processing, Data Analysis at Scale in the Cloud, Statistical Modeling of Data, Intro to Machine Learning, Data Structures and Algorithms, Causal Inference

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

TECHNICAL SKILLS

Tools and Languages	Python, Git, 焰FX, Java, GCP, AWS, PyTorch, R, SQL
Quantitative Research	Mathematical optimization, Mathematical Modeling
Communication	English, French and Kiswahili

PROFESSIONAL EXPERIENCE

Regulatory Data Specialist Team Lead

Servicing 3M, Pace Analytical Services

- Analyzed and led projects to maintain regulatory product data using 3M software and collaborating with its global customers.
- Delegated workload to a team of 20 Regulatory Data Specialists, and actively participated in client meetings.
- Automated a better workflow process using Python that sped up project delegation by 20%.

Data Scientist Mentee

SharpestMinds

- Predicted employee absenteeism in hours for a courier company using Random Forest and Logistic Regression as classification models in Python with Random Forest having a 2% performance advantage.
- Created a web app using Heroku and Flask to predict the click-through rate on an advertisement.

PROJECTS

Sentiment Analysis on Real and Synthetic Data

Duke University

- Generated synthetic review data with Naive Bayes and used it to test model accuracy between Naive Bayes and LSTM using PyTorch. Naive Bayes achieved the best results with 89% accuracy.
- Classified real Amazon reviews and compared accuracy between Naive Bayes and LSTM with the latter performing 20% better.

Recommendation Engine Application

Duke University

 Developed a serverless Flask application that takes user input and returns five similar products using AWS Sagemaker and Elastic Search.

Estimating the impact of Opioid Control Policies

Duke University

- Analyzed the effectiveness of policy interventions in opioid-related overdose deaths using the Difference in Difference technique in 3 US states.
- Proposed more state-level policy implementations after seeing a 40% decrease in deaths in Florida.

HackDuke Hackathon

Duke University

- Collaborated with 2 students to develop an end-to-end cloud computing application to help Duke Dining restaurants reduce food waste by more than 25% and contribute to Duke's 2025 carbon neutrality goal.
- Deployed the solution using Cloud build to display dashboard analytics and presented findings in front of a 10 person jury panel. Impact of Job Training on Workers Oct. 2021

Duke University

Quantified the effect of job training on annual earnings using linear regression with 27 years old unmarried males earning 2573\$ more after the program.

RESEARCH EXPERIENCE

Student Researcher

St. Olaf College

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

Marlyne Hakizimana

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Feb. 2019 - June. 2021

Minneapolis, MN

May 2018

Feb. 2019 - Dec. 2020

Minneapolis, MN

Nov. 2021

Nov. 2021

Nov. 2021

Oct. 2021

Sept. - Dec. 2017