Melissa Ngamini mguemon1103@gmail.com

(443)-414-0574 Atlanta, Georgia DATA SCIENTIST

GitHub LinkedIn Portfolio

Data scientist skilled in implementing machine learning to solve business problems. Experienced with Python, SQL, sci-kit learn, seaborn, matplotlib, and experimental design.

Skills

Advanced:

- Python and SQL
- Pandas
- Visualization with seaborn and maplotlib
- Regression and Classification

Proficient:

- Supervised and Unsupervised Learning
- Clustering algorithms
- Natural Language Processing
- Tensor flow and Keras

Expert:

- Research
- Teaching
- Written and Verbal communication
- Matlab.

Certification:

- Machine Learning (Online Course, Stanford University)
- R Programing and Data Scientist Toolbox (Online Course, John Hopkins University).

Recent Projects

Predicting an Article Topic from its Content:

In this project, I looked at Data that mostly contained news articles relating to the 2016 US Elections. Using a vectorizer on the articles titles and contents and latent semantic analysis, I was able to clusters the articles into different topics to be able to predict an article topic based on its content. This was achieved using Stochastic Gradient Descent.

Predicting Available Listings in Seattle Airbnb:

In this project, I looked at the Airbnb Data for the city of Seattle in 2014. Using Random Forest Classifier, was able to identify features in the data that were important to make prediction about availability of Airbnb Listings. This was achieved using Gradient Boosting.

Name Hip Hop Artist using Song Lyrics:

In this project, I looked at the data that contained song lyrics. The goal of this project was to be able to predict an artist name given song lyrics. Using a tf-idf vectorizer I was able to create features and achieved the stated goal using Stochastic Gradient Descent.

Experience

MOREHOUSE COLLEGE

Assistant Professor

Atlanta, GA August 2016 – Present

- Worked with a student on their Senior Seminar project: "Classification with Support Vector Machine".
- Organized, planned and executed lectures for class sizes of 15 to 35 undergraduate students.
- Prepared syllabus and course materials. Wrote exams and exams keys. Held regular office hours for students.
- Used technology including MyMathlab and WebAssign to assign homework.

NORTH CAROLINA STATE UNIVERSITY

Instructor/Teaching Assistant

Raleigh, NC August 2009 – 2015

- Organized, planned and executed lectures for class sizes of 15 to 150 undergraduate students.
- Prepared syllabus and course materials. Wrote exams and exams keys. Held regular office hours for students.
- Used technology including WebAssign and Maple to assign homework.
- In the larger classes, managed two recitations leaders, whose responsibilities included running smaller groups of problem sessions, grading, and taking attendance.

Education

THINKFUL **Data Science Program**

December 2018

- Completed intensive data science program with a focus on Python, mathematical tool-sets, statistical analysis, and big data techniques including
- Learned industry best practices and standards by collaborating several hours every week with a senior data scientist.

NORTH CAROLINA STATE UNIVERSITY

PH.D, APPLIED MATHEMATICS

August 2015

- Dissertation Topic: <u>Nonlinear Filtering Problems for systems governed by PDEs</u>
- Qualifying exams passed: Matrix theory, Numerical analysis, Linear Algebra.