# Mustapha Taiwo Wolly

301-793-7390 | wollymustapha@gmail.com | www.linkedin.com/in/mustaphawolly | www.github.com/MT-Wolly

#### **CAREER SUMMARY**

Seeking to secure an Internship position where my skills and dedication will be efficiently utilized to benefit the growth of the Organization. Enthusiastic problem solver with the ambition to consistently expand and refine programming abilities.

#### **EDUCATION**

University at Buffalo Buffalo, New York Aug 2021 – Dec 2022(Exp)

### M.S Engineering Science: Robotics

Related Courses – Machine Learning, Robot Algorithms, Robot Control System, Computer Vision, Collaborative Robots, Robot Dynamics and Kinematics, Fundamentals of Artificial Intelligence.

African Leadership University, Online Jul 2021 - Date

## **ALX Software Engineering Program**

Related Courses – Data Structures, Algorithms, Object-Oriented Design, Deployment, Regex expressions.

University of Mines and Technology Tarkwa, Ghana Jul 2019

**B.S Mechanical Engineering** 

### **SKILLS & TOOLS**

Programming Languages and Databases: C, Python, MATLAB, MySQL, Bash Scripting

Tools, Web & Systems: Microsoft Office Suite, Fusion 360, Jupyter, Visual Studio, Windows, Unix, Git, ROS, HTML, CSS

#### **PROJECTS & CASE STUDY**

# **Logistic Regression Practical Case Study using Machine Learning**

- Utilized a regression-based machine learning model to predict whether a tumor is benign or malignant.
- Tuned the hyperparameters of the model for better performance of the model.

## Implementing Deep Learning Models: Python, TensorFlow, Scikit learn

- Leveraged Artificial Neural Networks (ANN), Python and TensorFlow to predict net hourly electrical energy output for a powerplant based on its temperature, pressure, humidity, and exhaust vacuum.
- Using this model helped in selecting parameters for the steam turbine design.

#### Design of a Gearbox: Fusion 360

- Solved analytically governing equations to match the motor speed to compressor speed following guidelines for compression parameters.
- Implemented conceptual design of gearbox using Fusion 360 and conducted simulations to test viability of design.

### **WORK EXPERIENCE**

## Mechanical Design Engineer, Federal Institute for Industrial Research, Oshodi, Nigeria:

Jan 2020 - Nov 2020

- Teamed up with other engineers to solve governing equations for design prototypes of agricultural processing equipment and documentation for easy access.
- Collaborated with 3 CAD drafters to optimize design prototype equipment for initial testing of agricultural processing equipment.
- Managed project on steam turbines, analyzed pros and cons on materials selection for fabrication and presented results to head of department.

## Machine Sales Administrator Intern, MANTRAC Ghana Ltd., Accra, Ghana:

Jun 2018 - Aug 2018

- Compiled documents into corresponding folders for efficient use which slashed document retrieval time by 30%.
- Monitored inventories via system servers to avoid products oversell, in doing so, a better understanding of availability and demand amplified inventory turnover and profits.
- Created reports, spreadsheets and databases using Microsoft office suite for clients' needs and controlled distribution of these written communications.

### **CERTIFICATIONS & INVOLVEMENT**

Membership, National Society of Black Engineers, September 2021.