WATSON AGBRAMU

405-110 University Avenue West, Waterloo, ON, N2L 3E2 +1 519 575-5584

Portfolio Email LinkedIn Github

SKILLS

Programming: Python, JavaScript (ES6), TypeScript, MATLAB.

Web Development: HTML, CSS, SCSS, Bootstrap, Materialize CSS, Semantic UI, jQuery, React JS, Redux, Express JS, Node JS

Data Analysis: NumPy, Pandas, Scikit-learn, Matplotlib, TensorFlow, Keras.

Database: MySQL, PostgreSQL, MongoDB, FireStore.

Interpersonal: Analytical, Strategic Planning, Effective Communication, Leadership, Adaptability, Team Player.

Others: Git, Linux, Heroku, Agile (Scrum).

<u>EDUC</u>ATION

University of Waterloo, Waterloo, ON

December 2020

GPA 3.9/4.0

Master of Engineering in Electrical and Computer Engineering, **Distinction**Certificate in Business and Entrepreneurship (Conrad School of Business)

• Relevant Courses: Methods and Tools for Software Engineering, Introduction to Optimization, Data & Knowledge Modelling & Analysis, Image Processing and Visual Communications, Management and Leadership, Project Management, Operations & Supply chain Management.

Federal University of Oye-Ekiti, Oye-Ekiti, Ekiti State

January 2018 **GPA** 4.85/5.0

Bachelor of Electrical and Electronics Engineering, First Class Honours

PERSONAL PROJECTS

- Created an e-commerce application using Express JS, React JS, Redux, SCSS, JavaScript, Firebase, Firestore, Stripe, etc. and hosted on Heroku.
- Created a <u>customer feedback</u> application using **Express JS**, **React JS**, **Redux**, **Redux Form**, **CSS**, **Mongoose**, **MongoDB**, **Passport JS**, **Stripe**, etc.
- Performed basic CRUD operations which follows RESTful API conventions using Express JS, React JS, React hooks, Context API, PostgreSQL, etc.
- Created a <u>personal portfolio website</u> showcasing my skills using React JS, Redux, CSS, Bootstrap, Particles JS etc. and hosted it on github pages.
- Created a fun <u>color picker</u> project hosted on **github pages** to help with picking the right background when designing websites using **React JS and CSS**.
- Created the backend for a <u>developer's blog post</u> using **Express JS**, **Passport JS**, **MongoDB**, etc. Currently developing the frontend using **ReactJS/Redux**.
- Created a <u>task app backend</u> using **Express JS, Mongoose, JSON web token, BCrypt JS**, etc. to keep track of my activities. Frontend to be implemented.

EXPERIENCE

Master's degree

September 2019 - December 2020

University of Waterloo, Waterloo, Ontario, Canada

Data & Knowledge Modelling & Analysis

• Created a dog breed classification model with **Python** using **transfer learning** on fine-tuned **Inception-Resnet-V2** and **Efficientnet-80** architectures and obtained an accuracy of **92.18%** and **85.38%** respectively on 120 dog breeds which surpassed existing literatures.

Image Processing and Visual Communications

- Created and proposed new annotations for a subset of INRIA person dataset using Label-Img Software to improve detection performance by over 20%.
- Performed Data Augmentation using **Python** and trained **Faster RCNN** using **Inception-Resnet-V2** and **Resnet-50** as backbone architecture on pedestrian images obtaining an average performance of **89.6%** and **86.0%** respectively.

Project Management

• Developed part of the Teachers without Frontiers (TWF) Project deliverables by employing project management methodologies on the Science Curriculum for Grade VI and Grade VII to improve education access in remote areas of Pakistan by over 30%.

Graduate Assistant May 2018 - March 2019

University of Ilorin, Ilorin, Kwara State, Nigeria

- Lead discussion sections, tutorials, or laboratory sections for 200, 300 and 400 level students
- Evaluated and graded laboratory exams and assignments in compliance to the provided marking scheme.
- Developed marking schemes and answer keys for student assignments.
- Secretary at final Year Defence accessed students and graded them based on performance.
- Took meeting minutes at departmental meetings by using MS Word to account for all issues discussed.

Student Intern April 2016 - October 2016

Alcon Nigeria Limited, Warri, Delta State, Nigeria,

Shell Workshop, Warri, Delta State, Nigeria.

- Suggested a series-parallel battery connection using knowledge of electronics to aid boost the current required to drive the CAT engine to restore power to Brotobor community after a power outage of over 2 weeks.
- Calibrated Pressure and Temperature gauges to be used at the Forcados Yokri Integrated Project (FYIP) using a dead weight tester and dry block calibrator.
- Troubleshooted and repaired CAT generators using the CAT tester and troubleshooting guide.
- Installed and positioned cable trays, switch gears, lighting fixtures, HVACs, and air conditioners.

LEADERSHIP AND AWARDS

- Best Overall Graduating Student for 2016/2017 academic session (Federal University Oye-Ekiti Prize).
- Departmental and Overall Best Graduating Student in the Faculty of Engineering for 2016/2017 academic session.
- Faculty of Engineering Best Student for 2016/2017 academic session (J.A Soremekun Memorial Prize).
- Selected as a representative by the Faculty of Engineering at a NUESA event to give a lecture on safety practices in the workplace based on my leadership potential, communication skills and academic success.
- Selected to represent the Faculty of Engineering at a project exhibition at Afe Babalola University, Ado-Ekiti based on my academic performance and timely completion of my final year project.
- Selected as the Provost during my NYSC program due to my leadership potentials.

<u>CERT</u>IFICATIONS

- Coursera: Programming for Everybody (Getting Started with Python) Python Data Structures, Using Python to Access Web Data, IBM Exploratory data analysis for Machine Learning.
- Data Camp: Introduction to Python, Intermediate Python, Data Manipulation with pandas, Python Data Science Toolbox (Part 1 & 2), Introduction to Data Visualization with Matplotlib.
- LinkedIn Learning: Applied Machine Learning: Foundations, React.js Essential Training, React.js: Building an Interface.