# Ebuka Johnbosco Okpala

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### **Education**

### Clemson University, Clemson, SC

Ph.D. in Computer Science

Aug 2020 – Dec 2023 (Expected)

• Research interests: Applied ML, ML for security and security

M.S. in Computer Science

Aug 2018 – May 2020

- GPA (3.75 / 4)
- Relevant coursework: Design and Analysis of Algorithms, Deep Learning, Hand on Machine Learning, Applied Data Science, Database Management Systems, Software Architecture and Computer Security

### Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

B.S in Computer Engineering

Aug 2011 - 2015

Second Class (Upper division)

### **Technical Skills**

Programming Languages: Python, C/C++, Java and SQL

Machine Learning Libraries: TensorFlow, Keras, PyTorch, Trax, scikit-learn, Numpy and Pandas

Web Development: JavaScript, PHP, jQuery, Node.js, MySQL, HTML5 and CSS

# **Work Experience**

### **Clemson Online, Clemson University**

Aug 2019 - May 2020

Digital Tech Coordinator (Graduate Assistantship)

- Developed data analytics dashboards using SQL, Splunk, and its Search Processing Language. These
  dashboards provided valuable insights that enabled the University to manage the cost of learning technology
  tools
- Worked across teams to develop and maintain the learning technology tools' websites of Clemson University that Clemson Online supports
- Developed an automation script to automate the calculation of location metrics of thousands of Clemson University students. Improving a manual process that took weeks to under 5 minutes

### Eresea Foods Inc, Anambra, Nigeria

Jan 2017 - June 2018

Web Software Developer

 Designed and developed the Eresea Foods' website from start to production and managed the website after production

### Andela, Lagos, Nigeria

Oct 2017 - May 2018

Web Application Developer Trainee

- Developed a progressive news feed headlines web application
- Developed RESTFUL APIs for a web-based student information system using Node.js, AngularJs and MonogoDB

### **Publications and Posters**

• <u>BranchCorr</u>: Detecting Incompatible Branch Behavior by Enforcing Branch Correlation Integrity. Long Cheng, Ebuka Okpala, Song Liao, Danfeng (Daphne) Yao. (*Poster presented at IEEE SecDev 2019*)

## **Academic Projects**

### **Database Management System**

Spring 2019

• Designed, developed and deployed <u>MeTube</u> on AWS. This project is a modified version of YouTube which supports more file types, users can start discussions, create channels, comment etc

Deep Learning Spring 2019

Developed a Convolutional Neural Network model to classify and detect cyberbully in images using PyTorch

 Implemented neural machine translation model to translate human readable dates into machine readable dates using an attention model using TensorFlow

### **Hand on Machine Learning**

Fall 2019

- Developed a Naïve Bayes model from starch to predict if an email subject line is Spam or not spam, using Python and NumPy
- Developed a Logistic Regression model and a K-Nearest Neighbour model from scratch to classify fishes based on body dimension, using Python and NumPy

### **Certifications**

- Deep Learning by deeplearning.ai on Coursera
- DeepLearning.Al TensorFlow Developer by deeplearning.ai on Coursera
- Natural Language Processing with Probabilistic Models by deeplearning.ai on Coursera