## Ebuka Johnbosco Okpala

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#### Education

#### Clemson University, Clemson, SC

Ph.D. in Computer Science

August 2020 – December 2023 (Expected)

• Research interests: Applied ML, ML, and security

M.S. in Computer Science: GPA: 3.75

August 2018 - May 2020

• 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.Sc. Computer Engineering: Second Class (Upper division)

August 2011 – June 2015

#### **Technical Skills**

Programming Languages: Python, C/C++, Java, Swift 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**

Clemson, SC

Digital Tech Coordinator (Graduate Assistantship)

August 2019 - Present

- 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
- Automated the calculation of location metrics of thousands of Clemson University students. Improving a manual process that took weeks to under 5 minutes

Apple Inc Seattle, WA

AI/ML Software Engineering Intern

May 2021 - August 2021

Developed new end-to-end Siri feature that improves the Siri experience in the home

Eresea Foods Inc Anambra, Nigeria

Web Software Developer

January 2017 – June 2018

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

Andela Remote

Web Application Developer Trainee

October 2017 - May 2018

- 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**

- Characterizing Offensive Tweets in the Era of COVID-19. Song Liao, Ebuka Okpala, Long Cheng, Nishant Vishwamitra, Mingqi Li, Hongxin Hu, Feng Luo, Matthew Costello. International Conference on Web and social Media (ICWSM), 2022. (In review)
- COVID-HateBERT: a Pre-trained Language Model for COVID-19 related Hate Speech Detection. Mingqi Li, Song Liao, Ebuka Okpala, Tong M, Matthew Costello, Long Cheng, Hongxin Hu, Feng Luo. International Conference on Machine Learning and Applications (ICMLA), 2021
- BranchCorr: Detecting Incompatible Branch Behavior by Enforcing Branch Correlation Integrity. Long Cheng, Ebuka Okpala, Song Liao, Danfeng(Daphne) Yao. Secure Development Conference (SecDev), 2019 poster

## **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 other 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