ADEDAMOLA WURAOLA

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GITHUB | WEBSITE | LINKEDIN

OBJECTIVE

Current Ph.D. student at the University of Auckland, researching machine learning algorithms and its efficient implementation. Currently at the commercializing stage of my research with interest from companies such as Nokia, Nvidia, and Huawei and continuously working under pressure to meet strict deadlines. I am open to applying my machine learning knowledge to healthcare especially precision medicine. Quick learner and passionate about working in a fast-paced environment to build robust, efficient and effective general-purpose hardware friendly learning algorithms with my over four years of programming using Python language and major machine learning frameworks. Ability to work as part of a team and possesses initiative spirit in developing new products and learning new things.

TECHNICAL SKILLS

- **Statistical Analysis:** machine learning and deep learning skills for applications such as Computer Vision and Natural Language Processing
- **Machine Learning:** demonstrated skills in building efficient and effective algorithms for faster and better performance accuracy machine learning models
- **Coding:** strong coding ability producing clean, efficient code, source control (Git), debugging and understanding large code bases

- **Programming Language:** Matlab, Python C++, Latex
- **Deep Learning Frameworks:** TensorFlow, Keras, NumPy, Pandas, Scikit-learn,
- **Software:** Jupyter Notebook, Xcode, Git
- **Multi-Platform Deployment:** CUDA, NVIDIA (TensorRT, CuDNN)

PROJECTS

Development of Novel Universal Activation Function Link

- Extensive research into machine learning research gap
- Development of a new activation function capable of dynamic shape for various applications with low resource usage.
- Project implemented in TensorFlow, Matlab, and Keras Framework and have been published in a reputable journal. Link

Development of Stochasticity-based Machine Learning Algorithm

- Two novel mode of stochasticity introduction during training was proposed, implemented, and tested
- The implementation achieves a 15-25% improvement in convergence speed over a wide range of computer vision datasets
- The work has been published in a reputable journal.

EXPERIENCE

University of Auckland

11/2016 – Current | Machine Learning Researcher and Graduate Teaching Assistant

- Development of new algorithms for machine learning task, especially exploring stochasticity introduction and the effect on the training accuracy and convergence
- Hardware accelerator for deep learning and development of novel functions
- Training different deep learning architectures such as VGG-16, ResNet, and other Convolutional Neural Network architectures for deep dataset using Keras and TensorFlow.

Obafemi Awolowo University

01/2014 to 09/2014 | Webometric Officer

- Strong problem-solving skills demonstrated by coming up with new and exciting webpage contents. Responsible for monitoring the web presence of the university using data analytics tools and getting involved with designing and management of various departmental web sites as well as planning of seminars and giving presentations to students. The University was **1st** in Nigeria and **8th** in Africa during my tenure.
- Effective Communication through effective supervision of various numbers of students posted to my department in Webometric Unit.
- In-depth knowledge of building and maintaining team spirit among designated groups of people evident from coordinating over 20 interns. Leadership executed in leading over twelve set of students during their industrial attachment in my department

EDUCATION

2016-2019 Doctor of Philosophy: Electrical and Computer Engineering

University of Auckland – Auckland, New Zealand. **Topic:** Continuous Online Hardware Learning of Artificial Neural Networks, **Advisor:** Dr. Nitish Patel and Prof. Sing Kiong Nguang

2014-2016   Master of Engineering: Telecommunication and Electronic Engineering (**WITH DISTINCTION**)

Sheffield Hallam University – Sheffield, United Kingdom. **Major:** Software Engineering, Applicable Artificial Intelligence, Digital Signal Processing, Communication Engineering, Computer Networks, Dissertation done using C++ and MATLAB for Cloud Computing Data Compression

2008 – 2013 Bachelor of Engineering: Electrical and Electronic Engineering (**CGPA: 4.47/5.0**)

University of Ilorin – Ilorin, Nigeria. **Major:** Engineering Mathematics, Calculus

AWARDS

- **2018 |** New Zealand Leadership Institute (NZLI) Scholarship Award
- **2017 |** University of Auckland Summer Scholarship for Researchers
- **2016 |** University of Auckland Faculty of Engineering Doctoral Scholarship Award (Based on Merit, came 1st in ranking of about 100 Ph.D. students)
- **2016 |** Best graduating MSc Student Faculty of Engineering
- **2016 |** National Society of Black Engineering (NSBE) 30 Under 30 Rising Stars Award