# Sewade Olaolu Ogun

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### Education

2019–2020 MSc. Mathematical Sciences, Machine Intelligence.

African Institute for Mathematical Sciences (AIMS), Ghana Ongoing

2018–2019 MSc. Electrical and Electronic Engineering, Power Systems.

University of Lagos (UNILAG), Nigeria

2017-2012 B.Tech Electronic and Electrical Engineering.

Ladoke Akintola University of Technology (LAUTECH), Oyo, Nigeria GPA-4.53/5.0 First Class

# Experience

02.18- NLP Engineer, Remote/Part Time.

Present Proto - Vancouver, Canada

Create Al Customer Experience (AICX) chatbots for multilingual contact centers in African financial markets.

#### 04.17- Software Engineer.

Present Freelance

Build web app solutions for customers, colleagues and work place. Django/React/NodeJS

#### 04.17–09.19 **Predictive Maintenance Engineer**.

Flour Mills of Nigeria Plc, Nigeria

Evaluate trends in machine data to detect and predict machine failure for effective preventive maintenance

# Awards/Scholarships

2019 Masters Scholarship, sponsored by Facebook and Google

2012 Best Graduating Student, Communications Option

2009, 2010, MTNF Science and Technology Undergraduate Scholarship

2011

2006 1st Place, Lagos State Mathematics Olympiad in high school

2006 3rd Place, National Mathematics Olympiad in high school

2004 Bronze Medal, National Junior Science Olympiad in high school

### Graduate Coursework

Machine Learning, Convex Optimization, Deep Learning, Reinforcement Learning, Natural Language Processing, Natural Language Understanding, Gaussian Processes, Computer Vision, Kernel Methods, Geometric Machine Learning, Matrix Factorization

### Technical Skills

- 1 Programming Languages: Python, Java, Octave/Matlab, HTML5/CSS, Javascript, SQL
- 2 Operating Systems: Linux, Windows
- 3 Research: Git, Scikit-learn, SciPy, NumPy, Pandas, Spacy, Stanford NLP, LATEX
- 4 Deep Learning Frameworks: Tensorflow, PyTorch, Keras, Fastai
- 5 web: Google Cloud, Colab, Heroku, NodeJS, Django, React

### Workshops

2020 Machine Learning Summer School, Max Planck Institute of Intelligent Systems, Germany - Virtual

2019 Deep Learning IndabaX, Lagos

### **Projects**

Speech Yoruba Speech Dataset: A dataset for low-resource speech tasks.

Over 3 hours of audio recordings of yoruba text which can be used for various low-resource language/speech tasks - [Project Link]

Speech Comparing Yoruba and French Speech Models in Low-Resource Settings.

CPC models trained on 1 hour of yoruba and french audio evaluated with Character Error Rate. - [pdf link]

Computer Exploring Detectron2 for Object Detection Tasks.

Vision Instance segmentation, pose estimation, object tracking performed on datasets using the detectron2 library.

Pretrained models finetuned on custom tasks - [project link]

Computer Cassava Disease Classification.

Vision Classify cassava plants as belonging to one of 4 various disease classes or healthy - [project link]

NLP/Kernel **DNA Sequence Classification using Kernel Methods**.

Predict whether DNA sequence region is binding site using Kernel methods. Experimented with different kernels such as mismatch kernel, gaussian kernel, weighted-degree kernel - [project link]

# Articles/Talks

Articles From GRU to Transformer [link]

K Nearest Neighbor as a Neural Network [link]

You Don't Really Know Softmax [link]

Other interesting articles on https://ogunlao.github.io/archive/index.html

Talks Adversarial Examples, AMMI, 2020 [link]

Chance Constrained Optimization, AMMI, 2020 [link]

### Additional Courses and Certifications

2020 **Data Engineering with Google Cloud**, Coursera/Google, [Cert Link].

Designed solutions involving Extract, Transform and Load (ETL) operations of batch/streaming data using Cloud Dataproc, Cloud Dataflow and Bigquery, analyzed big data using Google Data Studio and Bigquery

2019 **Deep Learning Specialization**, deeplearning.ai, [Cert Link].

Implemented deep learning models and algorithms such as batch normalization, convolution, optimization algorithms(RMSprop, Adam), YOLO, LSTM enabling a concrete understanding of the subject.

2019 **IBM Data Science Professional Certificate**, *Coursera/IBM*, [Cert Link].

Instance segmentation, pose estimation, object tracking performed on datasets using the detectron2 library. Pretrained models finetuned on custom tasks - Project Link

2014 Oracle Database SQL Administration, Oracle University.

Database management using SQL queries

#### Service

2019-2020 Facilitator, Computer Vision Reading Group, AMMI

2013 Cadet-in-chief, Federal Road Safety Club