

Sewade Olaolu Ogun

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Education

- 2019–2020 **MSc. Mathematical Sciences, Machine Intelligence.**
African Institute for Mathematical Sciences (AIMS), Ghana
- 2018–2019 **MSc. Electrical and Electronic Engineering.**
University of Lagos (UNILAG), Nigeria
- 2007–2012 **B.Tech Electronic and Electrical Engineering.**
Ladoke Akintola University of Technology (LAUTECH), Oyo, Nigeria
GPA – 4.53/5.0 First Class

Experience

- 12.20–
Present **Teaching Assistant/Resident Tutor, AMMI Programme.**
African Institute for Mathematical Sciences, Senegal
- Resident teaching assistant for the African Masters in Machine Intelligence program.
- 03.21–06.21 **Machine Learning Research Intern, Remote.**
Ubenwa
- Preliminary analysis of infant cry database for feature extraction and interpretability
- Develop neural acoustic models for predicting pathology from infants cry
- 02.20–11.20 **NLP Engineer, Remote.**
Proto - Vancouver, Canada
- Worked on Covid-19 AI chatbot for Pidgin and Yoruba languages.

Masters Thesis

- Title *Learning of speech features using weak labels*
- Supervisors Moustapha Cisse, Yossi Adi (Facebook AI)
- Description The task is to learn representation for low resource languages by transferring acoustic representations from high resource acoustic models

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
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Articles/Talks

- Articles How to create a speech dataset for ASR, TTS, and other speech tasks [link]
 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>
Talk Adversarial Examples, AMMI, 2020 [link]

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 Vision **Exploring Detectron2 for Object Detection Tasks.**
 Instance segmentation, pose estimation, object tracking performed on datasets using the detectron2 library. Pretrained models finetuned on custom tasks - [project link]
- Computer Vision **Cassava Disease Classification.**
 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]

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

Awards/Scholarships

- 2019 Masters Scholarship, sponsored by Facebook and Google
- 2012 Best Graduating Student, Elect/Elect Communications, Undergraduate
- 2009 - 2011 MTNF Science and Technology Undergraduate Scholarship
- 2006 1st Place, Lagos State Mathematics Olympiad in high school
- 2004 Bronze Medal, National Junior Science Olympiad in high school

AI Community Affiliations

- Masakhane NLP Research Group
- Black-In-AI
- 2019-2020 AMMI Vision and NLP Discussion Group