

Sewade Olaolu Ogun

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Education

- 2019–2020 **MSc. Mathematical Sciences, Machine Intelligence.**
African Institute for Mathematical Sciences (AIMS), Ghana - *Distinction*
- 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), Nigeria - *First Class*



Experience

- 03.21–06.21 **Machine Learning Research Intern, Remote.**
Ubenwa - Quebec, Canada
🔗 Developed a Cry Activity Detection library for segmenting cry signals in audio among more than 79 different non-cry sounds
🔗 Developed a model to detect infant pathology such as asphyxia from cry
- 12.20–
Present **Research and Teaching Assistant, AIMS/AMMI .**
African Institute for Mathematical Sciences, Senegal
- 02.20–11.20 **NLP Engineer, Remote.**
Proto - Vancouver, Canada
🔗 Built a conversational AI tool to automate Covid-19 education and counter disinformation in Nigeria
🔗 Worked on data labelling for African languages



Graduate Coursework

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

>_ Technical Skills

- 1 Programming Languages: python, javascript, SQL
- 2 Deep Learning Frameworks: pyTorch, pytorch-lightning, tensorflow, Fastai
- 3 Research: Git, scikit-learn, NumPy, pandas, spacy, huggingFace, \LaTeX
- 4 web: Google Cloud, Colab, Heroku, NodeJS, Django, React



Projects

Cry Activity Detection.

Cry Activity Detector (similar to a Voice activity detector) that distinguish cry from other activity in audio

Infant Disease Detection from Cry.

Determine if a baby has a set of diseases by; analyzing her cry sample, and machine learning classification

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

Over 3 hours of clean audio recordings of yoruba text. It can be used for low-resource automatic speech recognition

Exploring Detectron2 for Object Detection Tasks, .

Segmentation, pose estimation and object tracking performed on custom datasets using detectron2 library

Cassava Disease Classification, .

Classify Cassava leaves as belonging to one of 4 various disease classes or healthy

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

Additional Courses and Certifications

- 2020 **Data Engineering with Google Cloud**, *Coursera/Google*, [↗](#).
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*, [↗](#).
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*, [↗](#).
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.
SQL Administration, Database management

Workshops

- 2021 Volunteered at International Conference for Learning and Representations, ICLR 2021
- 2020 Machine Learning Summer School, Max Planck Institute of Intelligent Systems, Germany - Virtual
- 2019 Deep Learning IndabaX, Lagos

Articles/Talks

- Articles How to create a speech dataset for ASR, TTS, and other speech tasks [↗](#)
From GRU to Transformer [↗](#)
Other interesting articles on [my homepage](#) [🏠](#)
- Talk Adversarial Examples: Showing how deep learning models can be fooled by adversarial attacks [↗](#)

Awards/Scholarships

- 2019 Masters Scholarship, sponsored by Facebook and Google
- 2012 Best Graduating Student, Electrical Communications, Undergraduate
- 2009 - 2011 MTN Foundation Science and Technology Scholarship
- 2006 1st Place, Lagos State Mathematics Olympiad, High school
- 2004 Bronze Medal, National Junior Science Olympiad, High school

AI Communities

- Masakhane NLP Research Group
- Black-In-AI