

# 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
- 2007–2012 **B.Tech Electronic and Electrical Engineering.**  
Ladoke Akintola University of Technology (LAUTECH), Oyo, Nigeria  
GPA – 4.53/5.0 First Class

## Experience

- 02.18–  
Present **NLP Engineer, Remote/Part Time.**  
Proto - Vancouver, Canada  
Create AI Customer Experience (AICX) chatbots for multilingual contact centers in African financial markets.
- 04.17–  
Present **Software Engineer.**  
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, 2011 MTNF Science and Technology Undergraduate Scholarship
- 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

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## 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]

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## 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]

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## 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

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## Service

- 2019-2020 Facilitator, Computer Vision Reading Group, AMMI
- 2013 Cadet-in-chief, Federal Road Safety Club