Wisdom O. Ikezogwo

CONTACT INFORMATION	+(1) 206-532-9139 — wisdomik@cs.washington.edu — wisdomikezogwo.github.io
RESEARCH INTERESTS	Computer vision, Medical image analysis, Representation learning.
AUXILIARY INTERESTS	Control theory, Computational neuroscience, Robotics, Embedded systems.

EDUCATION

University of Washington, Seattle, USA   2021-Present

Ph.D. Paul G. Allen School of Computer Science and Engineering.
Advisor: Prof. Linda Shapiro

Obafemi Awolowo University, Ile-Ife, Nigeria   2013-2019

B.Sc. Electronic & Electrical Engr. — GPA 4.73/5.00 — Class rank 2/120.
- Dissertation Topic: "Development of an application for combining disparate EEG seizure datasets into a single dataset" — Supervisor: Dr. Kayode P. Ayodele

IBRO-SIMONS Computational Neuroscience Summer School, Cape-Town, South Africa

January, 2020
- Projects: "Putting attention into convolutional neural network." and "Exploring convolutional neural network classification of non-image data"

ACADEMIC EXPERIENCE

University of Washington, Seattle, USA.

Research Assistant—*Graphics and Imaging Laboratory (GRAIL)*   September, 2021 - Present
- Working on predicting the behaviour of a class of cancerous tumours called solitary fibrous tumours using multi-scale ultra-high resolution histopathology whole slide images and clinical metadata.
- Working on developing self-supervised objectives using domain histopathology knowledge on whole slide images.

Teaching Assistant   September 2021 - March, 2022
Introduction to computer programming. Assignments solve real data manipulation tasks from science, engineering, business, and the humanities. Python programming, control and data abstraction, file processing, and data visualization.
- CSE 160: Data Programming — Fall 2021 & Winter 2022

Obafemi Awolowo University, Ile-Ife, Osun Nigeria.

UG. Research Asst.—*Biosignal Processing, Inst. & Control Lab* March, 2017 - September 2021
- Worked on embedded systems for Brain-computer Interfacing (BCI) using Emotive Epoc+
- Worked on data integration process for disparate multivariate time series datasets, Characterizing spectral components of said data towards building dynamical dimensionality reduction methods.
- Working on using Artificial neural networks for classification tasks on brain EEG signals and projects promoting the robustness of clinically deployable models.

Teaching Assistant   April - August, 2019
Co-taught 2nd year undergraduate level course in Fundamentals of Electronic & Electrical Engineering. Responsible for recitation classes, quiz, homework assignments and continuous assessments grades for over 90 students within EEE and $\sim$ 700 student within the faculty.

- EEE 203/201: Fundamentals of Electronic & Electrical Engr., Rain Semester 2019.

Co-Instructor   April - August, 2017
Outreach: teaching basic robotics–structure building and programming. Shared responsibility for lecture sessions and outreach proposals to high schools and colleges.

PROFESSIONAL EXPERIENCE	**Okra, Inc.**, Lagos, Nigeria.

Okra, Inc., Lagos, Nigeria.
ML Engineer   October, 2020 - September 2021
Worked on Transformer models for named entity recognition and other natural language tasks, that feed into services as an API which includes Predicted Income, Spending pattern, and Reconciliations.

Demz Analytics Limited, Lagos, Nigeria.
Data Scientist / ML Engineer   October, 2019 - October 2020
Developed various models, and systems from data processing model to recommendation systems leveraging transformer models and epsilon-greedy bandit strategy, Deploying these into production.

PUBLICATIONS

Google Scholar

K. P. Ayodele, **W. O. Ikezogwo**, M. A. Komolafe, and Philip Ogunbona. 2020. "Supervised domain generalization for integration of disparate scalp EEG datasets for automatic epileptic seizure detection." *Computers in Biology and Medicine* 120: 103757.

K. P. Ayodele, **W. O. Ikezogwo**, and A. A. Osuntuyi. 2020. "Empirical Characterization of the Temporal Dynamics of EEG Spectral Components." *International Journal of Online and Biomedical Engineering (IJOE)*.

PAPERS IN PREPARATION

W. O. Ikezogwo, ***. "Can machine learning techniques predict behaviour and prognosis for Solitary Fibrous Tumors from H&E stained slides alone?"

CONFERENCES

International Conference on Machine Learning (ICML)   2020

- Participated in the conference and several of its workshops on health care majorly focusing on Model interpretabilty, Explainability, Clinician-in-the-loop and Domain shift.

PRESENTATIONS

Black In Neuro Mini-Conference (BIN2020)   2020

- **Oral presentation** — K. P. Ayodele, **W. O. Ikezogwo**, M. A. Komolafe, and Philip Ogunbona. 2020. "Supervised domain generalization for integration of disparate scalp EEG datasets for automatic epileptic seizure detection."

HONORS AND AWARDS

IBRO-Simons Computational neuroscience Summer School travel grant, Cape Town.	2020
Prof. L.O. Kehinde prize for the Best Graduating Student in the Instrumentation and Control option, OAU Ile-Ife, Nigeria.	2019
Pa Simeon Ladipo Oyebolu & Mrs Emily Olabopo Oyebolu prize for Best Male Graduating Student, OAU Ile-Ife, Nigeria.	2019
Federal Government Scholarship Award, Nigeria. — cumm. value: $1500	2017-2019
Total/NNPC National Merit Scholarship. — cumm. value: $1500	2016-2019
Etisalat Nigeria Merit Scholarship. — value: $250	2015

SOFTWARE PROGRAMMING & LANGUAGES	• Computer Languages: Python, Bash (Slurm), LaTeX, Arduino C. • Software: Pytorch, OpenCV, Docker, Singularity(on HPC resource), Flask. • Human Languages: English (native), Igbo (native), Yoruba (Fluent), Pidgin (Fluent).
EXTRACURRICULAR	• Basketball — Red Cross Volunteering — Writing (Newsletters, Music)
SOCIETIES	• Black in AI (BAI), Black in Neuro (BiN), IEEE, EducationUSA-Abuja
LEADERSHIP	• Librarian, Dept of Elect. & Elect Engr. OAU　　　　　　May, 2017 - May, 2018
REFERENCES	• Available on request