Ayobami Samson Oni

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EDUCATION

Purdue University, West Lafayette, Indiana, United States of America	**2024 - 2028**
Doctorate; Agricultural and Biological Engineering (*in-progress*)	

The Federal University of Technology Akure, Ondo, Nigeria,	**2015 – 2021.**
Bachelor of Engineering; Agricultural Engineering.	**(4.32/5.00, (3.6/4.0 iWes))**

- **Departmental rank:**   9 out of 116 students.
- **Final year thesis:**   **Modification & Performance Evaluation of a Cassava Harvester**
- **Thesis grade:**   A

- **Advisor:**   Prof. Fasinmirin J. T. (jtfasinmirin@futa.edu.ng) & Dr. Adetola O. A. (oaadetola@futa.edu.ng)

International Institute of Project and Safety Management (IIPSM)	**2022**
Health Safety and Environment (HSE 1&2) / Environmental Impact Assessment (EIA) Certificate	**Distinction**

PUBLICATIONS

Fasinmirin, J., Adetola, O., & **Oni, A.** (2024). Modification and performance evaluation of soil loosening system of a cassava harvester. International Journal of Engineering and Sciences and Applications, 8(2), 49-57.

Adetola, O.A., Daodu, E.O., & **Oni, A.S.** (2023). Development and Performance Evaluation of a Millet Dehuller, In: Dr. Bahar Altunok and Zohaib Hassan Sain (Editors). *5th International Dicle Scientific Research and Innovation Congress, Proceedings Book* September 09 - 10, 2023, Turkey, pp 657-667. KONGRE KİTAPLARI | isarc (isarconference.org)

TECHNICAL AND DIGITAL SKILLS

- Data Analysis and Visualization using **Microsoft Excel, Power Bi, and IBM SPSS.**
- Engineering Analysis, and drawing using **FreeCAD**
- Simulation and development of **Printed Circuit Board (PCB)** and embedded system using **Arduino UNO** and **Proteus**
- Water model development using **Visual MODFLOW**
- Machine learning algorithms using **Python** programming language.

Other software: EPANET, Mendeley, Microsoft To-Do, Microsoft PowerPoint, Microsoft Word.

RESEARCH EXPERIENCE

PHIG Laboratory & Ecosystem Science Laboratory	**Department of Agricultural and Biological Engineering**	
Graduate Student Researcher (ongoing)		**2024 - 2028**

- Modeling of 3D groundwater measuring device using Ansys and Openfoam software
- Development of 3D groundwater flow device in the laboratory via PCB designs
- Testing and evaluation of the 3D groundwater device in the laboratory and on groundwater wells on the field.

Agricultural Engineering Laboratory and Workshop	**National Cereal Research Institute, Ibadan, Oyo, Nigeria**	
Internship		**2023**

- Independently reviewed and analyzed the efficiency of a Cooking Stove.
- Independently modified the cooking stove by changing the design parameters to optimize the efficiency of the stove.
- Independently conducted comparative studies of diverse rice waste while ensuring burning efficiency and eco-friendly are key parameters.

Mechanical Laboratory and Workshop.	**Department of Agricultural Engineering, FUTA, Nigeria.**	
Final Year Thesis		**2020 – 2021**

- Independently analyzed the cassava harvester's shear force and bending moment diagrams using FreeCAD.
- Independently designed isometric and orthographic computer-aided designs (CAD) for the cassava harvester using FreeCAD
- Independently carried out a comparative study of the modified cassava harvester.
- Independently carried out performance evaluation and testing of the cassava harvester on the field.

Environmental Engineering Laboratory.	**Department of Agricultural Engineering, FUTA, Nigeria.**	
Student Researcher		**2018 – 2019**

- Independently determined the total dissolved solids (TDS), temperature, and turbidity in rainwater, aquaculture wastewater, and grey water.
- Participated in the determination of chemical properties such as ph. Value, and electronic conductivity of grey water, yellow water, and urine.
- Participated in the treatment of municipal wastewater (greywater) using filtration, coagulation, flocculation, and chlorination techniques.

WORK EXPERIENCES

Afrimash Company Limited, Ibadan, Oyo state	**May. 2022 – August 2023**

Agricultural Engineer, *Customers Experience Department.*
- I provide quality technical expertise to over 20,000 farmers on various irrigation equipment and materials
- I organize and moderate webinars on the irrigation of different farm plants as well as water scheduling and water intake of crops to avoid water wastage.

Oyo State Ministry of Agriculture, Natural Resources and Rural Development.	**March 2022 – February 2023**

NYSC Engineer, *Office of the Director of Agricultural Engineering Service*
- Active participation in documenting equipment maintenance plans.
- Daily participation in the decarbonization of engine blocks and cylinder heads.
- Supervised and coordinated technicians to ensure that various machinery and equipment were properly and proactively maintained.

Kadosh Mechatronics, Akure, Ondo state	**June 2019 – December 2019**

Undergraduate Internship
- Learnt rudiments of data analysis and research writing.
- Participated in the simulation and development of a grain dryer.
- Learned embedded systems and developed a smart soil water level detecting device using Arduino and Proteus for simulation.

Sunmibare Waters, Abeokuta, Ogun state.	**October 2018 – January 2019**

Student Work Experience Program (SWEP)
- Carried out routine maintenance on the factory machines.
- Actively participated in the quality control processes to ensure the water conforms to the standard requirement of the WHO for drinking and domestic use.

LEADERSHIP EXPERIENCE

● Chief Liaising Officer, Oyo State Ministry of Agriculture, Ibadan.	Mar.2022 – May. 2022
● Unit Head, CACCFFUTA.	Feb. 2020 – May. 2021
● Team member, Agricultural Engineering Soccer Team, FUTA	Mar. 2016 – Jan. 2017

VOLUNTEERING EXPERIENCE

● **Presiding Officer**, Independent National Electoral Commission (INEC)	Feb. 2023 - March 2023
● **Volunteer,** World Education Day, Education CDS Group, NYSC.	April 2022 - Jan. 2023
● **Volunteer**, Education CDS group, World Toilet Day, National Youth Service Corps	May 2022 - Feb.. 2023
● **Volunteer**, Climate Walk, FUTA.	July 2021
● **Member,** Give Information Fight Flood (GIFF), FUTA	Feb. 2020 – Dec. 2020

AWARD/RECOGNITIONS

● National Institutes of Water Resources (NIWR) Grant Award	2024
● Award of Excellence, International Institute of Project and Safety Management	2022
● Award of Gratitude, Nigeria Institute of Agricultural Engineers, student body	2021
● Grooming Centre University Research Grant	2020

PROFESSIONAL MEMBERSHIPS

● Student Member, Nigeria Society of Engineers (NSE).	2023 – date.
● Associate member, International Institute of Project & Safety Management (IIPSM)	2022 – date.
● Member, International Environment Forum (IEF)	2022 – date.
● Member, International Association of Engineers (IAEng).	2021 – date.
● Member, Data Science Nigeria (DSN).	2020 – date.
● Member, Zindi	2019 – date.
● Member, Kaggle	2019 – date.

PROFESSIONAL DEVELOPMENT TRAINING/MOOCs

● Fundamentals of Grant Writing, Young African Leaders Initiative (YALI)	2023
● I-Train Africa; Certificate of Participation and Completion.	2022
● Health Safety and Environment Professional, level (1-2), *via* IIPSM.	2022
● Environment Impact Assessment (HSE 3/EIA) via IIPSM.	2022
● Global Data Analytics Internship Program *via* Hash Analytics	2020
● Flood risk management *via* Disaster-ready	2020
● Project Management Essentials *via* Disaster-ready	2020
● Training Completion on Data Analysis via Think Tech Initiative	2020