

# CURRICULUM VITAE

## A. GENERAL INFORMATION

1. **Name:** AWOFOLAJU Tolulope Tola
2. **Date and Place of Birth:** 28th May, 1984; Ijebu-Ode, Ogun State, Nigeria
3. **Gender:** Female
4. **Nationality:** Nigerian
5. **State of Origin:** Osun
6. **Local Government Area:** Ife East
7. **Marital Status:** Single
8. **Names and Ages of Children:** Nil
9. **Name, Relationship and Address of Next-of-Kin:** Dr Tomilayo Awofolaju, Sister, House 02 Road 2A, Zone 5, Agric, Ifesowapo Quarters, Ile-Ife.
10. **Permanent Address:** House 02 Road 2A, Zone 5, Agric, Ifesowapo Quarters, Ile-Ife.No 101A, Orisunmibare Street, Oke-Atan, Ile-Ife.
11. **E-mail Addresses:** [tolulope.awofolaju@uniosun.edu.ng](mailto:tolulope.awofolaju@uniosun.edu.ng)
12. **Registration with Research Gate:** Yes
13. **Link:** <https://www.researchgate.net/profile/Tolulope-Awofolaju>
14. **If No, Why?:** N/A
15. **Registration with Google Scholar:** Yes
16. **Link:** <https://scholar.google.com/citations?hl=en&user=FHrWa0AAAAJ>
17. **If No, Why?:** N/A
18. **Cell Phone Number:** +234(0)-803 828 9001
19. **College/ Faculty/Unit:** Science, Engineering and Technology/ Engineering
20. **Department:** Electrical and Electronic Engineering
21. **Position on First Appointment:** Lecturer II
22. **Present Position and Salary:** Senior Lecturer; CONUASS 5/3
23. **Date of Present Position:** 1<sup>st</sup> October, 2024
24. **Is your appointment confirmed?:** Yes
25. **Date of Confirmation of Appointment:** 30<sup>th</sup> May, 2025

## **B. EDUCATIONAL BACKGROUND**

### **1. Educational Institutions Attended with Dates**

- |                                                                  |           |
|------------------------------------------------------------------|-----------|
| i. Osun State University, Osogbo, Nigeria                        | 2021-2024 |
| ii. Federal University of Technology, Akure, Nigeria             | 2010-2012 |
| iii. Ladoke Akintola University of Technology, Ogbomoso, Nigeria | 2001-2007 |

### **2. Academic and Professional Qualifications with Dates**

- |                                                                                                                                 |      |
|---------------------------------------------------------------------------------------------------------------------------------|------|
| i. Doctor of Philosophy (Electrical and Electronic Engineering), Osun State University, Osogbo, Nigeria                         | 2024 |
| ii. Registered Engineer (R. 26,918) (Electrical Engineering)<br><i>[Council for the Regulation of Engineering in Nigeria]</i>   | 2014 |
| iii. Master of Engineering (Electrical and Electronics Engineering), Federal University of Technology, Akure, Nigeria           | 2012 |
| iv. Bachelor of Technology (Electronic and Electrical Engineering), Ladoke Akintola University of Technology, Ogbomoso, Nigeria | 2007 |
| v. West African Senior School Certificate                                                                                       | 1999 |

### **3. Other Relevant Qualifications: Nil**

### **4. Honours, Awards and Distinctions:**

#### Award of Honour:

Nigerian Universities Engineering Students Association (Osun State University Chapter)  
Award of honour 'in recognition of your tremendous contributions, selfless service towards the growth and upliftment of the Faculty of Engineering, Osun State University, Osogbo, Nigeria.

### **5. Research Fellowships and Grants with Dates: N/A**

## **C. WORK EXPERIENCE OUTSIDE THE UNIVERSITY SYSTEM**

**1. Olatunde Memorial Schools, Ilesa, Osun State** [Jan 2012-April 2012]: Mathematics Teacher of Senior Secondary Classes and Integrated Science Teacher of Junior Secondary Classes.

**2. National Youth Service Corps** [March 2008-March 2009]: As a teacher with Kano State Ministry of Education, taught Mathematics at the Primary School level at the Badawa Primary School, Badawa, Kano State

**3. Showgear Limited, Yaba, Lagos** [Nov 2007-March 2008]: Involved in Studio acoustics for sound control, padding of walls and pillars for echo absorption, sound production mixing and editing.

**4. Osun State Broadcasting Corporation, Osogbo, Osun State** [April 2005-Oct 2005]: Industrial Training of Editing studio for editing/packaging of programs to be transmitted, Radio and Television transmitter room, radio and television workshop. Outside broadcast. Involved in maintenance of studio room, operation of studio equipment such as console and the mixer, and operation of transmitters for transmission.

#### **D. WORK EXPERIENCE IN OTHER UNIVERSITIES:**

i. 2026 **Adeleke University, Ede, Nigeria**

**External Examiner** for four (4) MEng. Degree Theses in Electrical and Electronics Engineering

ii. 2026 **Redeemers' University, Ede, Nigeria**

**Adjunct Appointment as Senior Lecturer** at the Department of Electrical and Electronics Engineering

iii. 2013 -2014 **Afe Babalola University, Ado-Ekiti, Nigeria**

**Lecturer II** at the Department of Electrical and Electronics Engineering

#### **E. WORK EXPERIENCE IN OSUN STATE UNIVERSITY**

- |      |                                      |                           |
|------|--------------------------------------|---------------------------|
| i.   | October 1, 2024 till date            | <b>Senior Lecturer</b>    |
| ii.  | October 1, 2017 - September 30, 2024 | <b>Lecturer I</b>         |
| ii.  | July1, 2014 - September 30, 2017     | <b>Lecturer II</b>        |
| iii. | June 2009 - March 2010               | <b>Teaching Assistant</b> |

#### **F. CO-CURRICULAR PROFESSIONAL EXPERIENCE**

- (i) NIEEE
- (ii) APWEN
- (iii) Actively participating in the professional sessions of the Council for the Regulation of Engineering in Nigeria (COREN) as well as the Nigerian Society of Engineers (at the Osogbo Branch and at the national level).
- (iv) Involvement in all activities of the Nigerian Institute of Electrical and Electronics Engineers at the Osogbo Branch and at the national level.

## G. MEMBERSHIP OF PROFESSIONAL BODIES

- (i) Institute of Electrical and Electronic Engineers (IEEE): Membership No: **97782092**
- (ii) IEEE Women in Engineering: A branch of IEEE
- (iii) Council of Registered Engineers in Nigeria (COREN): Membership No: **R26,918**
- (iv) Nigerian Society of Engineers (NSE): Membership No: **38547**
- (v) Association of Professional Women Engineers of Nigeria (APWEN): Membership No:  
**APW/0001283**
- (vi) Nigerian Institute of Electrical and Electronic Engineers: Membership No: **M10226**

## H. SERVICES

### 1. Osun State University:

#### Department of Electrical and Electronic Engineering

- i. Head of Department 2026 till date
- ii. Examination Officer 2024 - 2026
- ii. APWEN Collegiate Coordinator, Osun State University, Osogbo, Nigeria. 2024 till date
- iii. Departmental Coordinator, Centre for Entrepreneurship Studies, Osun State University, Osogbo, Nigeria. 2023 till date
- iv. Reviewer of journals for UNIOSUN Journal of Engineering and Environmental Sciences. 2021 till date
- v. Member, Welfare Committee 2017 till date
- vi. Secretary, Academic Staff Departmental Board 2015 till date
- vii. Students' Academic Advisory 2014 till date

#### Faculty of Engineering

- i. International Conference of Engineering and Environmental Sciences Committee 2024
- ii. Staff Adviser, Nigerian Universities Engineering Students' Association (NUESA) 2018
- iii. Member, Faculty Accreditation Committee 2017

### 2. Community:

- i. Member, Kimpact Development Initiative, a non-governmental organization 2002 till date

### 3. National:

- (i) Corps member: National Youth Service Corps (NYSC)- 2008/2009
- (ii) Reviewer: UNIOSUN Journal of Engineering and Environmental Science

### 4. International: Nil

## I. COURSES TAUGHT DURING THE CURRENT ACADEMIC SESSION

## 1. Undergraduate

|      |         |   |                                                       |   |   |
|------|---------|---|-------------------------------------------------------|---|---|
| i.   | EEE 210 | - | Introduction to Electrical and Electronic Engineering | - | 3 |
| ii.  | EEE 415 | - | Signals and Systems                                   | - | 3 |
| iii. | EEE 417 | - | Principles of Communication                           | - | 3 |
| iv.  | EEE 501 | - | Final Year Project I                                  | - | 3 |
| v.   | EEE 502 | - | Final Year Project II                                 | - | 3 |
| vi.  | EEE 528 | - | Data and Communication Networks                       | - | 3 |
| vii. | EEE 546 | - | Digital Communication Principles                      | - | 3 |

## 2. Postgraduate:

|      | Code    |   | Title                                    |   | Unit |
|------|---------|---|------------------------------------------|---|------|
| i.   | EEE 607 | - | Statistical Methods                      | - | 3    |
| ii.  | EEE 609 | - | Engineer in Society                      | - | 3    |
| iii. | EEE 628 | - | Measurements and Instrumentation         | - | 3    |
| iv.  | EEE 651 | - | Communication Principles                 | - | 3    |
| v.   | EEE 728 | - | Wireless & Mobile Communication          | - | 3    |
| vi.  | EEE 730 | - | RF Subsystems & Satellite Communications | - | 3    |
| vii. | EEE 732 | - | Internet of Things                       | - | 3    |

## J. GRADUATE STUDIES SUPERVISION:

### (a) Doctor of Philosophy

- (i) Lateef Olashile AFOLABI (2023/52702): Optimization of Cognitive Radio Spectrum Utilization for Enhanced Performance and Interference Reduction. *(Co-Supervision Ongoing)*

### (b) Master by Research

- (i) Hammed Abiola FADAIRO (EEE/2016/0025). Comparative Evaluation of Global System for Mobile Communication Network Quality Using Key Performance Indicator In Osun, Oyo and Lagos State *(Completed)*
- (ii) Oreoluwa Omoniyi AJAYI (EEE/2016/0014). Design Of A Real-Time Thermistor Linearization System Using an Adaptive Neural Network With Dual Sensor Validation On Embedded Platform (Arudino). *(Supervision Ongoing)*
- (iii) Ayodeji Moses BISHI (EEE/2025/64100). Development and Optimization of a Wireless Internet of Things Monitoring System for Computer Numerical Control Machines. *(Supervision Ongoing)*

- (iv) Mubaraq IYANDA (EEE/2018/0009). Performance Evaluation of Signal-Strength-Based Handover in Nigeria's 4G LTE and 5G Networks *(Supervision Ongoing)*
- (v) Olumide Michael AINA (PG25616104). Empirical Evaluation of Atmospheric Attenuation On 5G-New Radio (NR) Throughput: A Seasonal Case Study of Osogbo Metropolis, Osun State. *(Supervision Ongoing)*

## K. PUBLICATIONS

- i. **Authored Books (Sole/Co-Authored):** Nil
- ii. **Books (edited/co-edited):** Nil
- iii. **Monographs:** Nil
- iv. **Chapters in Books:** Nil
- v. **Articles in learned journals:**
  1. Lasisi H.O., Omodeni H. Babatunde, Aderinkola B.F., Adeagbo M.F., Awofolaju T.T., Omodeni C.B., Fabunmi E. Y., Atanda O. S., Petinrin O. O., Oladiran T. A. (2026): A Novel Approach to Received Signal Power Optimization in 5G Networks Using Pelican Optimization Algorithm. *Journal of Engineering and Technology* 11(2), 203-214. URL: <http://journal.engineering.fuoye.edu.ng/index.php/engineer/article/view/1514> [*Published by: FUOYE Journal of Engineering and Technology*] (Onshore).
  2. **Tolulope Tola AWOFOLAJU**, Hammed Oyebamiji LASISI, Funmilola Margaret ADEAGBO, Emmanuel Toluwalope ODEDIRAN, Hammed Abiola FADAIRO, Isreal OGUNBODE (2026): Development of IoT-Based Air Quality Monitoring System for Environmental Sustainability. *Uniosun Journal of Engineering and Environmental Sciences*, 8(1), 172 – 176. URL: <https://journals.uniosun.edu.ng/ujees/article/view/493>. [*Published by: Osun State University, Nigeria*](Onshore).
  3. Funmilola Adeagbo, Hammed Lasisi, Fatimat Aderinkola, Mubarak Asafa, Olla Moses, Kehinde Alawode, Tolulope Awofolaju, Abdulsemiu Olawuyi (2025): Seasonal Impact of Water Parameters Variation on Signal Propagation in Underwater Communication Systems. *Journal of Science and Technology [JST]* 17(2), 39-47. URL: <https://publisher.uthm.edu.my/ojs/index.php/JST/article/view/21173/7824>. [*Published by: Penerbit University (UTHM), Malaysia*] (Offshore).
  4. Funmilola M. Adeagbo, Lasisi H.O., Fatimat B. Aderinkola, Mubarak O. Asafa, Olakunle Olukayode, Olatunde Oladepo, **Tolulope T. Awofolaju**, and Abdulsemiu Olawuyi (2025): Analysis on the Impact of Water Parameters for Underwater Communication. *OAUSTECH Journal of Engineering and Intelligent Technology*, 1(1), 168-175.

*[Published by: Olusegun Agagu University of Science and Technology, Nigeria]*  
**(Onshore).**

5. **Awofolaju T.T.**, Olasunkanmi O.J. and Olowookere O.E. (2024): Assessment of Data over 3G and 4G LTE Networks in Ibadan Metropolis, Nigeria. *Journal of Engineering and Scientific Research (JESR)*, 6(2), 85- 94. URL: <https://jesr.eng.unila.ac.id/index.php/ojs/article/view/173/121>. *[Published by: Universitas Lampung, Indonesia]*  
**(Offshore).**
6. Oladepo Olatunde, Ugwute Francis Okoro, **Awofolaju Tolulope Tola** (2024): Multiagent based Power Management for Grid-connected Photovoltaic Source Using the Optimized Network Parameters From Butterworth Inertia Weight Particle Swarm Optimization, *Buletin Ilmiah Sarjana Teknik Elektro*, 6(4), 366-380 *[Published by: Universitas Ahmad Dahlan, Indonesia]* **(Offshore).**
7. Olawuyi, A.A., Ajewole T.O., Oladepo O., **Awofolaju T.T.** (2024): Development of an Optimized Neural Network Model Using Hyper-Parameters Optimization for Electrical Load Prediction. *Elektrika Journal of Electrical Engineering*, 6(2),61-66. *[Published by: University Teknologi Malaysia]* **(Offshore).**
8. Olawuyi, A.A., Ajewole T.O., Oladepo O., **Awofolaju T.T.**, Agboola M.K., Hasan K.A. (2024): Development of an Optimized Support Vector Regression Model Using Hyper-Parameters Optimization for Electrical Load Prediction. *Uniosun Journal of Engineering and Environmental Sciences*, 6(2),76-85. *[Published by: Osun State University, Nigeria]*
9. **Awofolaju T.T.**, Lasisi H.O., Ajewole T.O., Adebayo S., Olawuyi A.A., Adeagbo F.M. and Asafa M.O. (2024): Validation of Key Performance Indicators of Mobile Telecommunication Operators Using Ensemble Models and Artificial Neural Networks with Nigerian Communication Commission's Thresholds, *UNIOSUN Journal of Engineering and Environmental Sciences*.6(1):61- 72, URL: <https://ujees.com.ng/volume-6-issue-1-2024/797-2/> *[Published by: Faculty of Engineering, Osun State University, Nigeria]* **(Onshore).**
10. **Awofolaju T.T.**, Lasisi H.O., Ajewole T.O., Olawuyi A.A., Adebayo S., Alawode K.O., Oladepo O. (2024): Performance Evaluation of Predictive Models for Key Performance Indicators In Telecommunication Networks. *University of Pietsi Scientific Bulletin, Faculty of Electronics Communications and Computers*. 24(1): 27-34. URL: [https://bulletin.feccupit.ro/archive/view/2024\\_1\\_4.html](https://bulletin.feccupit.ro/archive/view/2024_1_4.html) *[Published by: University of Pietsi, Romania]* **(Offshore).**

11. Olawuyi A.A., Ajewole T.O., Lawal M.O., **Awofolaju T.T.** (2023). Enhancing Load Prediction Accuracy using Optimized Support Vector Regression Models. *Journal of Digital Food, Energy and Water Systems* 4(2):23-36. URL: [https://journals.uj.ac.za/index.php/DigitalFoodEnergy\\_WaterSystems/article/view/2847/1723](https://journals.uj.ac.za/index.php/DigitalFoodEnergy_WaterSystems/article/view/2847/1723) [**Published by: University of Johannesburg, South Africa**] (Offshore).
12. **Awofolaju T.T.**, Lasisi H.O., Olawuyi A.A., Oladepo O., Adebayo S. (2023): Artificial Neural Network Based Prediction of Key Performance Indicators for Mobile Telecommunications. *Journal of Science and Technology*, 15(2) (2023):43 – 53. URL: <https://publisher.uthm.edu.my/ojs/index.php/JST/article/view/15261> [**Published by: Penerbit University (UTHM), Malaysia**] (Offshore).
13. **Awofolaju T.T.**, Bada O.M., Alawode K.O. and Orotosho S.P. (2023): Design and Implementation of an Automated Departmental Clearance System. *Adeleke University Journal of Science* 2(1): 149 – 157. URL: [www.aujs.adelekeuniversity.edu.ng/index.php/aujs/article/view/132](http://www.aujs.adelekeuniversity.edu.ng/index.php/aujs/article/view/132) [**Published by: Adeleke University, Nigeria**] (Onshore).
14. Lasisi H.O., Oladepo O., **Awofolaju T.T.** and Olalekan K.G. (2023): Enhancement of Signaling System Number 7 for Improved Quality of Service in Mobile Communication Network. *Adeleke University Journal of Engineering and Technology* 6(1): 197 - 204. URL: <http://www.aujet.adelekeuniversity.edu.ng/index.php/aujet/article/view/301> [**Published by: Adeleke University, Nigeria**] (Onshore).
15. Ogunseye A.A., Yesufu T.K., Ejidokun T.O., **Awofolaju T.T.**, Johnson D.O. (2023): A new Inductorless single capacitor step down DC-to-DC converter design. URL: <https://www.sciencedirect.com/science/article/pii/S2468227623000315?via%3Dihub> [**Published by: Elsevier: Scientific African**] (Offshore).
16. Lasisi H. O., Asafa M. O., Olawumi O. O., **Awofolaju T.T.** (2022): Energy Efficiency In Optical- Wireless Access Network Using Dynamic Bandwidth Allocation, *Journal of Energy and Safety Technology*, 5(2): 21- 29. URL: <https://jest.utm.my/index.php/jest/article/view/111> [**Published by: Universiti Teknologi Malaysia**] (Offshore).
17. Oladepo O., **Awofolaju T.T.**, Awobifa O. K. (2022): Wideband Land Mobile Satellite Channel Modeling for The Improved Channel Outages, *International Journal of Industrial and Production Engineering*, 1(2): 1- 13. URL: <https://journals.unizik.edu.ng/ijipe/article/view/1054>. **Published by: Nnamdi Azikiwe University, Nigeria**] (Onshore).
18. Obiyemi O.O., Lasisi H.O., Oladepo O., **Awofolaju T.T.** and Ibrahim M.A. (2022): A performance evaluation of cellular mobile network: A case study of Osun State University, *Adeleke University Journal of Engineering and Technology*, 5(1); 16 – 24.

URL: <http://www.aujet.adelekeuniversity.edu.ng/index.php/aujet/article/view/211>

**[Published by: Adeleke University, Nigeria] (Onshore).**

19. Oladepo O., Awofolaju T.T., and Lasisi H.O. (2022): Single and multiple placements of different DG types on the power distribution system, *Uniosun Journal of Engineering and Environmental Sciences*, 2(1);223- 233. URL: <https://ujees.com.ng/volume-4-issue-1-2022/601-2/> **[Published by: Osun State University, Nigeria] (Onshore).**
20. Oladepo O., Ajewole T.O., and Awofolaju T.T. (2022): Optimum Utilization of grid-connected hybrid power system using hybrid particle swarm optimization algorithm/w hale optimization algorithm, *Journal of Energy Storage*. URL: <https://onlinelibrary.wiley.com/doi/10.1002/est2.337> **[Published by: Wiley, USA] (Offshore).**
21. Oladepo O., Adebayo I., Obiyemi O.O. and Awofolaju T.T. (2021): Whale optimization algorithm for optimal location and sizing of renewable distributed generation, *LAUTECH Journal of Engineering and Technology*, 15(2); 93-100. URL: <https://www.laujet.com/index.php/laujet/article/view/472> **[Published by: LAUTECH Journal of Engineering and Technology, Nigeria] (Onshore).**

**vi. Review Articles:**

22. Oladepo O. and Awofolaju T.T. (2021): Operation and optimization technique for integrated distributed energy resources: A Review. *Adeleke Journal of Engineering and Technology*, 4(2): 77- 92. URL: <http://aujet.adelekeuniversity.edu.ng/index.php/aujet/article/view/183> **[Published by: Adeleke University, Nigeria] (Onshore).**
23. Oladepo O., Lasisi H. and Awofolaju T.T. (2019): A Review of Voltage Control Methods in Conventional and Active Distribution Network, *UNIOSUN Journal of Engineering and Environmental Sciences*, 1(2): 7- 17. URL: <https://ujees.com.ng/volume-1-issue-2-2019/411-2/> **[Published by: Osun State University, Nigeria] (Onshore).**

**vii. Refereed Conference Proceedings:**

24. Awofolaju, T. T., Lasisi H.O., Oladepo, O., Adebayo S., Bada O.M., Olawuyi A.A. and Awofesobi, P.K. (2024). **3<sup>rd</sup> International Conference on Engineering and Environmental Sciences (ICEES). Theme: Innovating Technology for Resource Utilisation and Environmental Sustainability.** ‘Development of Call Setup Success Rate Prediction Model using Ensemble Algorithm’, 25<sup>th</sup>-28<sup>th</sup> November, at Osun State University, Osogbo, Nigeria
25. Awofolaju Tolulope Tola, Esan Ifetobi Emmanuel, Oladepo Olatunde and Olalekan Bada (2022). **EKSU Faculty of Engineering 3rd Engineering Conference. Theme: Technology, Research and Innovations Toward Infrastructural Development And**

**Industrialisation for Sustainable Economic Development.** ‘Development of Microcontroller Based Ultrasonic Non-Contact Meter Rule for Height Measurement’, 6th to 8th December, at Ekiti State University, Ado-Ekiti, Nigeria.

26. **Awofolaju, T.T.** and Yahaya, J.A. (2019). Modeling A Wireless Alarm Response Center–A Scientific Approach To Solve Farmers And Herdsmen Conflict In Nigeria. In the *Proceedings of the 1<sup>st</sup> International Conference on Engineering and Environmental Sciences*, November 5- 7, Osogbo, Nigeria, pp 1085- 1094. URL: <https://ocs.uniosun.edu.ng/files/conferences/1/proceedings/2019/BookofProceedings-1stIntlConference.pdf> **[Published by: Faculty of Engineering and Environmental Sciences, Osun State University, Nigeria] (Onshore).**

**8. Un- refereed Conference Proceedings:** Nil

**9. Book Reviews:** Nil

**10. Technical Reports:**

‘Report of Practical Training and Engineering Experience’. A Technical Report submitted to the Council for the Regulation of Engineering in Nigeria (COREN) in partial fulfillment of the requirements for professional membership registration (2014).

**11. Unpublished Theses/ Dissertations:**

i. **Awofolaju T.T. (2024): Development of Prediction Models for Mobile Telecommunications Operators’ Quality of Service Using Ensemble and Artificial Neural Networks Techniques.** Unpublished Doctor of Philosophy Thesis, Department of Electrical and Electronic Engineering, Osun State University, Osogbo, Nigeria.

ii. **Awofolaju T.T. (2012): Bit Error Rate Performance of Combining Techniques Used In Mitigating Fading in Global System for Mobile Communication (GSM).** Unpublished Master of Engineering Thesis, Department of Electronic and Electrical Engineering, Federal University of Technology, Akure, Nigeria.

iii. **Awofolaju T.T. (2007): Design and Construction of 500VA Uninterruptible Power Supply Unit.** Unpublished Bachelor of Technology Thesis, Department of Electronic and Electrical Engineering, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

**12. Patents and Inventions:** Nil

**L. CURRENT RESEARCH ACTIVITIES**

**(i) Funded Research:** Nil

**(ii) Non-funded/Self-sponsored Research**

- i. Development of prediction models for mobile telecommunications operators' quality of service using ensemble and artificial neural network techniques.
- ii. Optimization of Cognitive Radio Spectrum Utilization for Enhanced Performance and Interference Reduction.
- iii. Implementation of an Artificial Neural Network Based Linearization Technique for Thermistor.

#### **M. CONFERENCES /SEMINARS/WORKSHOPS/RETREATS ATTENDED**

- i. **EKSU, Faculty of Engineering 3rd Engineering Conference** on Technology, Research and Innovations Toward Infrastructural Development And Industrialisation for Sustainable Economic Development, 6<sup>th</sup>-8<sup>th</sup> December 2022 at Odua Hall, Ekiti State University, Ado-Ekiti, Nigeria.
- ii. **Deep Learning IndabaX Nigeria 2022**, 26<sup>th</sup> – 27<sup>th</sup> September 2022 at UI Hostels-Conference Center, University of Ibadan, Ibadan, Nigeria.
- iii. **FUTA SEET 2018 USAID FEER Workshop on Transmission Grid Expansion:** The way forward for stability of power supply in Nigeria, 20<sup>th</sup> - 21<sup>st</sup> Aug 2018 at WASCAL Building, Federal University of Technology. Akure.
- iv. **25<sup>th</sup> COREN Engineering Assembly 2016 on Embracing the future:** Improving the Quality of Engineering Education and Practice in Nigeria, 8<sup>th</sup> - 10<sup>th</sup> August 2016 at International Events Centre (The Dome), Akure.
- v. **1<sup>st</sup> University of Ibadan Technology Conference (UITECH 2015)** on Energy Technology for Sustainable Development and Security, 6<sup>th</sup>- 8<sup>th</sup> July, 2015. University of Ibadan Conference Centre, Nigeria,
- vi. **23<sup>rd</sup> COREN Engineering Assembly 2014 on Commercialising Engineering:** An Imperative for National Development, 18<sup>th</sup> - 20<sup>th</sup> August 2014 at International Conference Centre, Abuja.

#### **N. EXTRA-CURRICULAR ACTIVITIES**

Training in data analysis with Excel, HTML, CSS, and JavaScript (Frontend Development)

#### **O. ANY OTHER RELEVANT INFORMATION**

##### **Special Lecture/Presentation Delivered**

October 17, 2024      **STEM Education for Girls: Encouraging Interest in Science, Technology, Engineering and Mathematics**

A Lecture Delivered at the seminar in commemoration of International Day of the Girl Child at Salvation Army School, Alekuwodo, Osogbo, Nigeria.

June 23, 2023

**From Classroom to Career: Building a Path for Women in Engineering.**

A Lecture Delivered at the seminar in commemoration of Woman in Engineering Day to the Association of Redeemer's University Electrical and Electronic Engineering Students', Redeemer's University, Ede, Nigeria.

**P. SUMMARY OF CONTRIBUTION TO KNOWLEDGE**

My research works have been in the arms of the development of prediction models for mobile telecommunications operators' quality of service using ensemble and artificial neural network techniques, analysis of bit error rate performance of combining techniques used in mitigating fading in global systems for mobile communication and contribution of adaptive voltage control on distribution networks by an intelligent transition from passive to active power system network configuration which proffers solutions to the rural isolated and intermittent micro energy grid and then applies the stochastic-based intelligent optimization techniques for the optimal evaluation of performance indices on the power system networks.

The contributions in various publications are as follows:

Development of Prediction Models for Mobile Telecommunications Operators' Quality of Service Using Ensemble and Artificial Neural Networks Techniques

Development of a decentralized multi-agent-based dynamic reactive power support. It incorporates the real-time evaluation of branch reactive power flow and power factor. Hence, signals and activate the dynamic operation of SCs based on the network requirement of reactive power

Development of a grid-connected hybrid PVSHF load following current injection technique. It annexes the MPPT and excitation system as a local means of control for the network voltage regulation

Derivation of a new multi-objective optimization technique based on the hybrid PSO-WOA optimization algorithm for siting and sizing the hybrid microgrid system to minimize voltage deviation and power loss

Modeling of a Wireless Alarm Response Center—A Scientific Approach To Solve Farmers And Herdsmen Conflict In Nigeria

AWOFOLAJU Tolulope Tola

Signature



Date 28/08/2026