

Engr. Dr. Sunny Orike

Department of Computer Engineering Rivers State University Port Harcourt +2348033988451 orike.sunny@ust.edu.ng

PERSONAL STATEMENT

I am an enthusiastic, focused, self-motivated, goal-oriented and COREN-registered Engineer cum University Lecturer, with experience spanning across teaching, administration, research and development. I have published results of our research work in reputable national and international academic journals and peer-reviewed conferences in the areas of Software Engineering and Artificial Intelligence, applied to solving engineering problems. I am articulate, excellence-driven and an active member of several professional bodies.

BIO-DATA

- Home Town: Osiakpu, Ogba/Egbema/Ndoni LGA, Rivers State
- Date of Birth: 21/07/1974
- Local Government Area: Ogba/Egbema/Ndoni
- State of Origin: Rivers State
- Nationality: Nigerian
- Marital Status: Married to Mrs. Dayibara Sunny-Orike
- Children:
 - 1) Chukwuoma Miracle Sunny-Orike (Female, DoB: 26/02/2008)
 - 2) Chukwumbana Esther Sunny-Orike (Female, DoB: 06/04/2012)
 - 3) Chukwumela Michael Sunny-Orike (Male, DoB: 29/12/2014)
- Religion: Christianity

SUMMARY OF SKILLS

\Rightarrow Technical:

- A Seasoned Lecturer and Administrator;
- Good ICT Systems expertise;
- Application of Artificial Intelligence techniques to Electrical Power Optimisation in a Deregulated System;
- Extensive knowledge of Structured Methodology for Software Engineering;
- Extensive knowledge and experience of Microsoft Office Suite;
- A fluent object-oriented programmer using Java.
- Research Method Skills: Presentation, Communication and Evaluation of Research.

\Rightarrow Others:

- Strong interpersonal skills;
- Excellent communication in both oral and written English
- Excellent priority considerations and organizational skills;
- Problem solving and analytical skills;
- Good planning and time management skills.

RESEARCH INTERESTS

- \Rightarrow Artificial Intelligence
- \Rightarrow Software Engineering
- \Rightarrow Big Data Analytics and Cloud Computing

WORK HISTORY

1. Rivers State University, Port Harcourt

- Assistant Lecturer (Nov. 2003 Sept. 2015);
- Lecturer I (Oct. 2015 Sept. 2018);
- Senior Lecturer (Oct. 2018 June 2021).
- **Reader** (June 2021 Date)
- Ag. Head, Department of Electrical Engineering (Nov. 2015 Feb. 2018);
- Ag. Head, Department of Computer Engineering (Sept. 2018 Mar., 2022);
- Deputy Director, Information & Communication Technology Centre (Mar. 2022 Date).
- \Rightarrow Taught the undergraduate and postgraduate Electrical and Computer Engineering courses;
- \Rightarrow Supervised undergraduate and postgraduate student's projects;
- \Rightarrow Served as a member of various committees in the Department, Faculty and University;
- \Rightarrow Carried out other responsibilities, tasks and activities in the university.

2. Federal University Otuoke, Bayelsa State

• Adjunct Senior Lecturer (Mar. 2021 – Feb. 2022); Adjunct Reader (Mar. 2022 – Date) Taught the following courses undergraduate in the Department of Mechatronics Engineering:

- \Rightarrow FEN 232 (Computer Programming with IT in Engineering);
- \Rightarrow MCE 306 (Electrical Circuit Theory);
- \Rightarrow MCE 409 (Electronics II);
- \Rightarrow MCE 507 (Digital Signal Modelling);
- \Rightarrow MCE 512 (System Modelling and Simulation).

3. Aptech Worldwide, Port Harcourt Centre

- Graduate System Engineer/Faculty Member (2001 2002)
 - ⇒ Taught several Certificate of Proficiency in System Management (CPiSM) and Diploma in System Management (DiSM) courses.
 - \Rightarrow Coordinated corporate training in the use of Microsoft Office packages.

EDUCATION

1. PhD in Artificial Intelligence: Heriot-Watt University, Edinburgh, UK (2015)

- *Title of Thesis:* Investigating Evolutionary Computation with Smart Mutation for three types of Economic Load Dispatch Optimisation problem.
- A cross-disciplinary research in the area of Genetic and Evolutionary Algorithms, applying Artificial Intelligence, a branch of Computer Science and Engineering to Electrical Engineering (Power Generation). The optimization approach helps electricity generating stations in determining how they can meet their customers' load demands while minimizing under/over-generation, and minimizing the cost of running the generating units, with emphasis on the dynamic nature of power industry and application to a deregulated electricity market.

2. MPhil, Computational Intelligence: Robert Gordon University, Aberdeen, UK (2008)

- *Title of Thesis:* Developing Computational Intelligence for Helicopter Flights Control.
- A research that developed algorithms that learns to fly a helicopter in the way a human pilot would. The novel approach draws on the benefits of using inverse simulation and genetic algorithms (GA) to model systems similar to human process. The aim is to define tasks for the helicopter and have the pilot find control settings that carry out those tasks. The work shows aspects of the GA-produced flight that are human-like, and the fact that humans do not move along precise trajectories.
- 3. MSc, Computing: Robert Gordon University, Aberdeen, UK (2003)
- 4. Bachelor of Technology in Computer Engineering (2.1): Rivers State University of Science and Technology, Port Harcourt (1998)
- 5. Senior School Certificate: Sancta Maria High School, Omoku, ONELGA, Rivers State (1990)

PUBLICATIONS

JOURNALS PAPERS

1) Elechi, P., **Orike, S**. & Okolie, C. E. (2022). Analysis of Bit Error Rate in a Rician Channel withAdditive White Gaussian Noise. *International Journal of Digital Electronics*, 7 (1), 13-24.

- Bakare, B. I., Orike, S. & Urama, M. O. (2022). Development of Safe Road Management System in Nigeria using Data Fusion (DF) and Internet of Things (IoT). *Journal of Electronics and Communication Engineering Research*, (6), 8-17.
- Ogbonnaya, M. E., Orike, S. & Nkoi, B. (2022). An Overview of the Deployment and Management of 5th Generation (5G) Wireless Network in Nigeria. *Journal of Newviews in Engineering and Technology (JNET)*, 4 (1), 1-13.
- 4) Bakare, B. I., **Orike, S.** & Abidde, W. N. (2022). Modulation Scheme for Video Conference Multimedia Application Over Worldwide Interoperability for Microwave Access (WIMAX) Technology. *IOSR Journal of Electronics and Communication Engineering*, 17 (2), 20-27.
- 5) Bakare, B. I., **Orike, S.** & Emesiobi, M. U. (2022). Evaluation and Analysis of Digital Terrestrial Television Signal in Port Harcourt and its Environs. *European Journal of Advances in Engineering and Technology*, 9 (2),11-16
- 6) Elechi, P., **Orike, S**. & Okotcha, R. N. (2022). Reduction of Optical Fiber Loss and Signal Scattering Using Marcuse's Method. *Journal of Information Technology and Sciences*, 8 (1), 22-32.
- Elechi, P., Orike, S. & Eze, O. J. M. (2022). Traffic Analysis of Global System for Mobile Communication Networks in Port Harcourt. *Journal of Network Security Computer Network*, 8 (1), 39-54.
- 8) Bakare, B. I., **Orike, S.** & Salami, I. A. (2022). Improvement of Internet of Things (IoT) Sensor PoweringUsing Multi Node Radio Frequency Energy Harvesting (REH). *IOSR Journal of Electronics and Communication Engineering*, 17 (1), 1-8.
- 9) Kolade, F. O., **Orike, S.,** Ahiakwo, C. O. & Idoniboyeobu, D. C. (2021). Maximization of Output and Effective Load Dispatch of Afam Power Plant. *Journal of Newviews in Engineering and Technology*, 3 (3), e- ISSN: 2795-2215.
- 10) Elechi, P., **Orike, S.** & Igbudu, A. O. (2021). Development of an Improved Solid Waste Collection System using Smart Sensors. *World Journal of Electrical and Electronic Engineering*, 1 (1), 51 65.
- 11) Elechi, P., Orike, S. & Ikpo, C. E. (2021). Performance Analysis of Patch Antenna for Ultra-Wideband using Particle Swarm Optimization. *Journal of Telecommunication, Electronic and Computer Engineering*, 13 (3), 53 – 59.
- 12) Bakare, B. I., Aggokabo, E. & **Orike, S.** (2021). Improved Microprocessor Based Smart System for Home Appliances. *European Journal of Advances in Engineering and Technology*, 8 (3), 33 39.
- 13) Elechi, P., **Orike, S**. & Akujobi, E. C. (2021). Minimization of Handoff Failure in a Heterogeneous Network Environment using Multi Criteria Fuzzy System. *Journal of Telecommunication, Electronic and Computer Engineering*, 13 (2), 17 22.
- 14) Elechi, P., Orike, S. & Amadi, T. C. (2021). Application of Worldwide Interoperability Microwave Access (Wimax) for Improved Wireless Communication System in Rivers State University, Nigeria *Journal of Network Security Computer Networks*, 7 (1), 35 – 58.
- 15) **Orike, S.**, Ahiakwo, C. O. & Adekanye, I. A. (2020). An Improved Electricity Billing Method by Distribution Companies using Evolutionary Algorithm. *Global Scientific Journals*, 8 (3), 1814-1828.
- 16) Oduah, K. C., Ahiakwo, C. O. & Orike, S. (2020). Capacitor Placement Optimization of Power Distribution Network using Genetic Algorithm for Choba Distribution Network, Port Harcourt. *Global Scientific Journals*, 8 (3), 1805 – 1813.
- 17) Orike, S., Ahiakwo, C. O., Idoniboyeobu, D. C. & Onoshakpor, R. M. (2020). A Time-Delay Smart Grid Communication Optimization Model for Transient Fault Tracing and Load Management. *Journal of Newviews in Engineering and Technology*, 2 (2), 39 – 51.
- 18) Orike, S., Ahiakwo, C. O., Idoniboyeobu, D. C. & Onoshakpor, R. M. (2020). Assessment of Communication Metrics for Smart Grid in Developing Countries. *American Journal of Engineering Research*, 9 (8), 205 – 214.
- 19) Bakare, B. I., Umoru, A. & Orike, S. (2020). Improved Alcohol Level Sensing Device that Transmit

Offender's Data to a Central Server through Short Messaging Services (SMS). *European Journal of Electrical Engineering and Computer Science*, 4 (5), 1-6.

- 20) Bakare, B. I., Oguichen, T. C. & Orike, S. (2020). An Improved Microcontroller Based Automated Home Using GSM Phone. *European Journal of Electrical Engineering and Computer Science*, 4 (4), 1-5.
- 21) Orike, S. (2020). A Discourse on Computer Systems Networking. *The Consulting Engineer*, 7 (1), 57 63. Invited Article on Information and Communications Technology, Published by the Association for Consulting Engineering in Nigeria.
- 22) Oko, A. A., Ahiakwo, C. O., Idoniboyeobu, D. C. & Orike, S. (2020). Threshold-Constraint and Swarm Intelligence-Based Load Flow Analysis for Steady State Stability Studies of the Nigerian 132-KVPower Transmission Network. *American Journal of Engineering Research*, 9 (2), 78-86.
- 23) Elechi, P., **Orike, S.** & Nathan, N. G. (2020). Web-Based Custodial Information Management System. *Journal of Computer Science, Engineering and Software Testing*, 6 (3), 33 44.
- 24) Bakare, B. I., Biebuma, K. J. & Orike, S. (2020). Analysis of Signal Attenuation in Digital Terrestrial Television (DTTV) Broadcasting. *European Journal of Electrical Engineering and Computer Science*, 4 (4), 1-8.
- 25) Elechi, P., Orike, S. & Abiola-Oseni, N. (2020). Application of Light Fidelity Network for Improved Indoor Wireless Communication System. *Journal of Electrical Engineering, Electronics, Control and Computer Science*, 6 (20), 15-20
- 26) Onu, K. E., Amesi, C., Elechi, P. & Orike, S. (2020). Analysis of Global System for Mobile Communication (GSM) Network in Port Harcourt under Different Loading Conditions using Erlang -B Techniques. *American Journal of Engineering Research*, 9 (1), 49 – 55.
- 27) Elechi, P., Orike, S. & Obisike, C. K. (2020). Improved Performance Analysis of PAL Television Error Value Correction using Inverse Matrix Generator Model. *American Journal of Engineering Research*, 9 (3), 163 – 169.
- 28) Alalibo, T. J., Orike, S. & Elechi, P. (2020). Bandwidth Optimization of Wireless Networks using Artificial Intelligence Technique. *Iconic Research and Engineering Journals*, 3 (9), 125 130.
- 29) Alalibo, T. J., Orike, S. & Elechi, P. (2020). Efficient Bandwidth Allocation in Wireless Network using Whale Optimization Algorithm. *Journal of Newviews in Engineering and Technology*, 1 (1), 118 122.
- 30) Bakare, B. I., Orike, S. & Oko, D. I. (2020). Evaluation and Analysis of the Deployment of Green Communication Technology in GSM. *European Journal of Electrical and Computer Engineering*, 4 (1), 1–9.
- 31) Bakare, B. I., Taol, V. T. & Orike, S. (2020). Comparative Analysis of Emitted Magnetic Fields from Liquid Crystal Display and Light Emitting Diode System. *European Journal of Electrical and Computer Engineering*, 4 (2), 1-8.
- 32) Bakare, B. I., Oghenekewe, A. B. & **Orike, S.** (2020). Reduction of Micro Bend Losses in Optical Fibers. *European Journal of Advances in Engineering and Technology*, 7(12), 1-8.
- 33) Elechi, P., Orike, S. & Echendu, D. A. (2020). Simulated Bandwidth Improvement of Hexagonal Circular Photonic Crystal Fiber using Hybrid Cladding. *Journal of VLSI Design and Signal Processing*, 6 (3), 10 – 24.
- 34) Oko, A. A., Ahiakwo, C. O., Idoniboyeobu, D. C. & Orike, S. (2019). Load Flow Analysis for Transient Stability Studies of Nigerian 132kV Power Transmission Network using Artificial Bee Colony. *Journal of Newviews in Engineering and Technology*, 1 (1), 1 – 10.
- 35) Urefe, V. E., **Orike, S**. & Odeyemi, F. M. (2019). An Improved Population Based Automatic Appliance Control System for Effective Energy Management. *Journal of Newviews in Engineering and Technology*, 1 (1), 62 70.
- 36) Elechi, P., Orike, S. & Agugharam, P. (2019). Analysis and Evaluation of Specific Absorption Rate

of GSM Signal in Port Harcourt, Nigeria. Journal of Engineering Research and Reports, 5 (4), 1-10.

- 37) Elechi, P., **Orike, S**. & Bille, S. F. (2019). Improved Ghost Worker Fraud Detection System Using Artificial Neural Network. *Journal of Electrical Engineering, Electronics, Control and Computer Science*, 5, (15), 17-24.
- 38) Orike, S. & Alalibo, T. J. (2019). Comparative Analysis of Computer Network Protocols in Wireless Communication Technology. *International Journal of Electronics Communication and Computer Engineering*, 10 (3), 76 – 85.
- 39) Enoch, J. D., Orike, S. & Ahiakwo, C. O. (2019). Design and Simulation of a Secured Enterprise Network for Faculty of Engineering, Rivers State University. *Computer Engineering and Intelligent Systems*, 10 (5), 26 – 41.
- 40) Elechi, P., **Orike, S**. & Ekwueme, U. (2020). Integrating Facial Recognitions and Short Messaging Service on Radio Frequency Identification for Improved Access Control System. *Journal of Network Security Computer Networks*, 6 (1), 6-12.
- 41) Enoch, J. D., Orike, S. & Ahiakwo, C. O. (2019). A Secured Enterprise Network using Hierarchical Network Model and Artificial Neural Network: A Case Study of Faculty of Engineering, Rivers State University. *Journal of Newviews in Engineering and Technology*, 1 (1), 40 – 52.
- 42) Ogbonna, B. O., Ahiakwo, C. O., Idoniboyeobu, D. C. & Orike, S. (2019). A Pricing Model for the Nigerian Electricity Transmission Using Artificial Neural Network Improved Electricity Transmission Pricing for the Nigerian Network. *CiiT International Journal of* Artificial Intelligent Systems and Machine Learning, 11 (12), 225 – 233.
- 43) Ogbonna, B. O., Ahiakwo, C. O., Idoniboyeobu, D. C. & **Orike, S.** (2019). Improved Electricity Transmission Pricing for the Nigerian Network. *Journal of Newviews in Engineering and Technology*, 1 (1), 1 11.
- 44) Ogbonna, B. O. Ndubuisi, S. N. & **Orike, S**. (2018). Design of Fuzzy Logic Load Intelligent Frequency Controller for Interconnected Power System Network. *CiiT International Journal of Fuzzy Systems*, 10 (10), 230 236.
- 45) Bakare, B. I., Ngeri, T. E. & **Orike, S.** (2018). Comparative Analysis of Signal Strength of Some Cellular Networks in Port Harcourt, Nigeria. *European Journal of Electrical and Computer Engineering*, 2 (6), 1 − 6.
- 46) Ahiakwo, C. O., Orike, S. & Obioma, A. O. (2018). A Computationally Intelligent Power Transmission Expansion Strategy in a Deregulated Energy System. *European Journal of Electrical and Computer Engineering*, 2 (4), 1 − 8.
- 47) KukuChuku, S., Idoniboyeobu, D. C., Orike, S. & Osikibo, T. L. (2018). Improved Underwater Wireless Communication System using OFDM Technique. *American Journal of Engineering Research*, 7 (9), 82 – 95.
- 48) Elechi, P., **Orike, S**. & Minah-Eeba, W. (2018). Simulated Sensitivity Improvement of Optical Receiver in Fiber Optic Network. *Advances in Applied Sciences*, 3(4), 43-51
- 49) Elechi, P., **Orike, S.**, Minah-Eeba, W. & Ikpo, C. E. (2018). Sensitivity Analysis of Avalanche Photodiode and PIN Diode Detectors in Optical Receivers. *Journal of Engineering Studies and Research*, 24 (4), 7 − 18.
- 50) **Orike, S**. & Ukpaka, C. P. (2018). Model Prediction on the Effect of Frequency on the Dielectric and Loss Factor. *Nigerian Journal of Oil and Gas Technology*, 3 (2), 27-35.
- 51) Elechi, P., **Orike, S**. & Anumbe, P. C. (2020). Mitigation of Micro and Macro Bends for Improved Bandwidth in Fiber Optics Communication. *Journal of VLSI Design and Signal Processing*, 6 (3), 25-34.
- 52) Elechi, P., **Orike, S.** & Musah, E.S. (2017). Determination of GSM Signal Loss in Multi-Partitioned Buildings, *European Journal of Electrical and Computer Engineering*, 1(3), 4-11.
- 53) Idoniboyeobu, D.C., Orike, S. & Biragbara, P.B. (2017). Optimisation of a Grid Connected

Photovoltaic System using Fuzzy Logic Control. European Journal of Electrical and Computer Engineering, 1 (2), 4-13.

- 54) **Orike, S.**, Elechi, P. & Ekanem, I.A. (2017). Assessment and Modelling of GSM Signal Propagation in Uyo, Nigeria, *European Journal of Engineering Research and Science*, 2 (11), 49-58.
- 55) Bakare, B.I., **Orike, S.** & Gabriel, C.S. (2016). Evaluation and Analysis of Electromagnetic Field Strength in Port-Harcourt and its Environs due to Radio Rivers Transmitter, *IOSR Journal of Electronics and Communication Engineering*, 11 (6), 23-29.
- 56) Ukpaka, C.P., **Orike, S.**, & Igwe, F.U. (2016). Simulation of Substrate, Microbial Interaction with Recycle using MATLAB Computational Approach. *European Journal of Engineering Research and Science*, 1 (1), 18-24.
- 57) Orike, S. & Brown, D. (2016). Big Data Management: An Investigation into Wireless and Cloud Computing. *International Journal of Interdisciplinary Telecommunications and Networking*, 8 (4), 34-50.
- 58) **Orike**, S. & Anireh, V. I. E. (2015). Smart Evolutionary Algorithm for Static Economic Load Dispatch Optimization in a Thermal Generating Station. *American Journal of Electrical and Electronic Engineering*, 3 (4), 100-106.
- 59) **Orike, S.** (2015). Computational Intelligence in Electrical Power Systems: A Survey of Emerging Approaches. *British Journal of Science*, 12 (2), 23 45.
- 60) **Orike, S.** (2014). Investigation and Analysis of Evolutionary Parametric Tuning for the Static Economic Load Dispatch Problems. *Asian Engineering Review*, 1 (2), 26-35.
- 61) Orike, S. (2014). Novel Adaptive Evolutionary Computation Approaches to the Dynamic Economic Load Dispatch Problems with Non-Smooth Fuel Cost Function. *International Journal of Computer Applications*, 103 (9), 11 – 18, New York, USA.
- 62) Orike, S. & Corne, D.W. (2013). Constrained Elitist Genetic Algorithm for Economic Load Dispatch: Case Study on Nigerian Power System. *International Journal of Computer Applications*, 76 (5), 27 – 33, New York, USA.
- 63) **Orike, S.** (2013). Genetic-Inverse Simulation Algorithm for a Model Helicopter Pilot. *British Journal of Science*, 9 (1), 40 48.
- 64) **Orike, S.** (2010). Simulating an Artificial Intelligence for Helicopter Flights Manoeuvre. *Journal of Engineering and Applied Sciences*, 2, 35 43.
- 65) Ahiakwo, C. O. & **Orike, S.** (2010). Distributed Generation (Renewable Energy)-Best Option for Oil Bearing Communities. *Journal of Sciences and Multidisciplinary Research*, 2, 9 14.

PUBLISHED CONFERENCE PAPERS

- Orike, S. & Oko, A. A., (2021). A Comparative Study of Swarm Intelligence Techniques for Load Flow Optimization of the Nigerian 132kV Power Transmission Network. In: Proceedings of the International Conference on Newviews in Engineering and Technology, 27th October, 2021, Rivers State University, Port Harcourt, Nigeria.
- Orike, S. & Enoch, J. D., (2019). A Smart Microcomputer-Based Controlled Device for Electrically Powered Gadgets. In: Proceedings of the World Congress on Engineering and Computer Science, 22-24 October, 2019, San Francisco, USA.
- Orike & Alase (2019). Dynamic Wireless Power Transfer in Electric Vehicles using Magnetic Resonance: A Case of Developing Countries World Congress on Engineering 2019, 3-5 July, 2019, London, U.K.
- 4) Orike, S. & Corne, D.W. (2014). Evolutionary Algorithms for Bid-Based Dynamic Economic Load Dispatch: A Large-Scale Test Case. In: *Proceedings of the 2014 IEEE Symposium Series on Computational Intelligence*, 9th – 12th Dec. 2014, Orlando, Florida, USA.

- 5) Orike, S. & Corne, D.W. (2013). An Evolutionary Algorithm for Bid-Based Dynamic Economic Load Dispatch in a Deregulated Electricity Market. *IEEE 13thUK Workshop on Computational Intelligence*, 9th – 11th Sept 2013, University of Surrey, Guildford, Surrey, UK.
- 6) Orike, S. & Corne, D.W. (2013). A Memetic Algorithm for Dynamic Economic Load Dispatch Optimisation. In: *Proceedings of the 2013 IEEE Symposium Series on Computational Intelligence*, Singapore, 16th – 19th April 2013.
- 7) Orike, S. & Corne, D.W. (2012). Improved Evolutionary Algorithms for Economic Load Dispatch Optimisation Problems. In: *IEEE 12th UK Workshop on Computational Intelligence*, Heriot-Watt University, Edinburgh, 5th – 7th Sept. 2012.
- Orike, S. & Okwoli, P. (2011). Wide Area Network Implementation Issues in Small and Medium Scale Enterprises. In: *Proceedings of Nigeria Computer Society 10th International Conference on Information Technology for People-Centered Development*, 25th – 29th July 2011, Abuja.
- 9) Orike, S. (2009). Multi-Objective Optimisation for a Helicopter Pilot using Genetic Algorithms. In: Proceedings of IEEE 2nd International Conference on Adaptive Science and Technology (ICAST), 14th – 16th December, 2009, Accra, Ghana, 1 – 8,

NOTABLE ADMINISTRATIVE ACHIEVEMENTS

- 1) As the Ag. Head, Department of Electrical Engineering, Rivers State University, Port Harcourt, I achieved the following:
 - i. Revision and update of the undergraduate programme's curriculum of the Department in line with the current NUC and COREN Basic Minimum Academic Standard (BMAS), defended it before the Curriculum and Instruction (C & I) Committee of the University, and had it approved by the Senate.
 - Revision and update of the postgraduate programme's curriculum of the Department (PGD, M.Tech and PhD) in line with the current NUC and COREN BMAS, defended it before the University's Postgraduate Committee and had it approved by the Postgraduate School and Senate.
 - iii. Development of a Short-Course Certificate courses for the Department of Electrical Engineering, defended it before CCE Board, and had it approved by the Senate.
 - iv. Initiated the recovery of Computer Engineering Department which lost NUC accreditation in 2005, in line with the exit report of 2015 NUC accreditation's resource personnel.
 - v. Prepared Electrical Engineering Department for successful accreditations by NUC in December 2015 and COREN in November 2017.
- 2) I have taught undergraduate courses in Electrical and Computer Engineering, Postgraduate (PGD, M.Tech and PhD) courses in Electrical Engineering; successfully co-supervised three (3) PhD students in Electrical Engineering and successfully supervised nineteen (19) M.Tech., four (4) PGD (in Electrical Engineering) and several B.Tech students (in both Computer and Electrical Engineering).
- 3) As the Ag. Head, Department of Computer Engineering, Rivers State University, Port Harcourt, I achieved the following:
 - i. Revision and update of the undergraduate programme's curriculum of the Department in line with the current NUC and COREN BMAS, defended it successfully before the Curriculum and Instruction (C & I) Committee of the University, and had it approved by the Senate.
 - ii. Prepared the Department for Resource Verification Visit by NUC in December 2020.

POSTGRADUATE SUPERVISION:

Ph.D. Theses

- 1) Onoshakpor, Raphael M. (2020). Development of a Smart Grid Model for the Nigerian Electricity Network
- 2) Ogbonna, Bartholomew O. (2020). Application of Artificial Neural Network for Improved Electricity Transmission pricing forecast for the Nigerian Network
- 3) Oko, Anthony A. (2020). Stability Assessment and Enhancement Modelling of 132-Kilovolts Power Transmission Network using Artificial Neuro-Swarm Technique.

Selected Master of Technology Dissertations

- 1) Umoru, Abdulwahab (2020). Improved Alcohol Level Sensing Device that Transmit Offender's Data to a Central Server through Short Messaging Services.
- 2) Renner, Margaret E. (2020). An Improved Microcontroller-Based Patients' Vital Signs Monitoring Device.
- 3) Ekwueme, Uchechukwu (2020). Integrating Facial Recognitions and Short Messaging Service on Radio Frequency Identification for Improved Access Control System.
- 4) Douglas, Happiness Ibiba (2020). Predictive Model for Corrosion Control in Crude Oil and Gas Production Facilities.
- 5) Ngeri, T. E. (2019). Comparative Analysis of Signal Strength of Some Cellular Networks in Port Harcourt, Nigeria.
- 6) Oko, Dominic I. (2020) Evaluation and Analysis of the Deployment of Green Communication Technology in GSM.
- 7) Taol, Victor T. (2020). Comparative Analysis of Emitted Magnetic Fields from Liquid Crystal Display and Light Emitting Diode System.
- 8) Oguichen, Trust C. (2020). An Improved Microcontroller Based Automated Home Security Surveillance System.
- 9) Biebuma, Kelvin J. (2020). Analysis of Signal Attenuation in Digital Terrestrial Television Broadcasting.
- 10) Anumbe, P. C. (2020). Mitigation of Micro and Macro Bends for Improved Bandwidth in Fiber Optics Communication.
- 11) Anugua, Bridget O. (2020). Reduction of Micro Bend Losses in Optical Fibers.
- 12) Aggokabo, Esther. (2020). Improved Microprocessor Based Smart System for Home Appliances.
- 13) Ikpuku, Tam E. (2020). Design and Simulation of an Intelligent Traffic Light System for GRA Cross Junction, Aba Road, Port Harcourt.
- 14) Minah-Eeba, Dennis W. (2019). Improving the Sensitivity of Optical Receiver using Optisystem.
- 15) Bille, Friday S. (2019). Improved Design of a Fraud Detection System for "Ghost" Civil Servants in Rivers State.
- 16) Kukuchukwu, Shadrach (2019). Improved Underwater Wireless Communication System using Orthogonal Frequency Division Multiplexing Technique.
- 17) Ngeri, Tamunopekerebia (2019). Comparative Analysis of Signal Strength of Some Cellular GSM Networks in Port Harcourt, Nigeria.
- 18) Ekanem, Iboro A. (2017). Assessment and Simulation of GSM Signal Propagation in Uyo, Nigeria.
- 19) Musah, Sufuyan E. (2017). Determination of GSM Signal Loss in Multi-Partitioned Buildings.

Selected Postgraduate Diploma Projects

- 1) Akhabue, Oselumese M. (2019). Design of a Web-Based Short Messaging Service Voting System.
- 2) Amadi, Collins B. (2019). Design and Construction of a Time Capturing Electronic Door Bell.
- 3) Bassey, Edidiong E. (2019). Design of Automatic Room Light Control with Bi-directional Visitor/Person Counter.
- 4) Sampson, Jeffery U. (2019). Design and Simulation of a Transceiver for Ultra-Wide Band Communication System.

Selected Bachelor of Technology Projects

- 1) Sagbodje, Onoriode (2019). A Study of the Recent Advances in Robotics Engineering.
- 2) Adebayo, Abibulahi (2019). A Comparative Analysis of Biometric Classification Techniques.
- 3) Njikonye, Godwin Nyeche (2019). Application of Big Data Analytics to Cloud Computing.
- 4) Abadi, Asiabo O. (2019). Solving the Travelling Salesman Problem using Genetic Algorithm.
- 5) Owen, Livingstone M. (2017). Investigating the Techniques used in Multiple Access Broadcasting in Digital Satellite Communication Systems.
- 6) Eyito, Toritse O. (2010). Design and Implementation of Online Bookshop.
- 7) Nelson, Ngo A. (2010). Design and Implementation of a Medical Test Result Utility for the Heamatology Department of Rivers State University of Science and Technology Health Centre.
- 8) Owhor, Endwell C. (2010). Design and Implementation of a Test Application for the Pathology Department of Braithwaite Memorial (Specialist) Hospital.
- 9) Onukaogu, Onyekach S. (2010). Design and Implementation of a Web-Based Flight Reservation System Database.
- 10) Ogwu, Vem O. (2010). Design and Implantation of an E-Commerce Application for Everyday Supermarket in Port Harcourt.
- 11) Ihunwo, Omunakwe T. (2010). Design of a Wireless LAN for the Council Chamber Building, RSUST, Port Harcourt.
- 12) Opusunju, Clement S. (2010). Design and Implementation of HIV/AIDS/STDs Test Result Application for Free Medical Centre (Case Study Lulu Briggs Health Foundation).
- 13) Ndulaka, Athenasuis N. (2010). Design and Implementation of a Knowledge Exchange Website.
- 14) Uchendu, Victor N. (2010). Design of a Local Area Network for the Faculty of Engineering Building, RSUST, Port Harcourt.
- 15) Woke, Kennedy U. (2010). Design and Implementation of a Local Area Network for Florida Medical Center.

MEMBERSHIP OF PROFESSIONAL BODIES

- 1) Registered with COREN (#R.22,012), 2011.
- 2) Registered with the Computer Professionals Registration Council of Nigeria (CPN, #004497), 2015.
- 3) Member, Nigerian Society of Engineers (#24817), 2010.
- 4) Member, International Association of Engineers (#109691), 2010.
- 5) Member, Nigeria Computer Society (#07238), 2010.
- 6) Member, British Computer Society (#010072355), 2005.
- 7) Member, Institute of Electrical Electronics Engineers (#80378533), 2008.
- 8) Member, Association for Computing Machinery (#7574510), 2008.

CONFERENCE ATTENDED

- 1) International Conference on Newviews in Engineering and Technology, 27/10/2021, RSU
- 2) COREN Engineering Assembly, 9-11 August, 2021, Abuja.
- 3) World Congress on Engineering, 3-5 July, 2019, London, U.K.
- 4) COREN Engineering Assembly, 6-8 August, 2018, Abuja.
- 5) NSE National Engineering Conference and Annual General Meeting, 20-24 Nov., 2017, Abuja
- 6) COREN Engineering Assembly, 7-9 August, 2017, Abuja.
- 7) Keynote Address Presenter, First National Conference, School of Engineering Technology, Port Harcourt Polytechnic, 17-21 July, 2017, Port Harcourt.
- 8) Co-hosted IEEE Virtual Events Program in Africa: "Big Data 2017", held at Rivers State University, Port Harcourt on 27th May, 2017.
- 9) World Congress on Engineering, June 29 July 1, 2016, London, U.K;
- 10) Wireless Telecommunications Symposium, 2016, April 18 21, 2016, London, UK;
- 11) IEEE Symposium Series on Computational Intelligence, 9-12 Dec. 2014, Orlando, USA.
- 12) IEEE 13thUK Workshop on Computational Intelligence, 9th 11th Sept 2013, University of Surrey, Guildford, Surrey, UK.
- 13) IEEE Symposium Series on Computational Intelligence, 16th 19th April 2013, Singapore.
 14) IEEE 12th UK Workshop on Computational Intelligence, 5th 7th Sept 2012, Heriot-Watt University, Edinburgh, UK.
- 15) Nigeria Computer Society 10th International Conference on Information Technology for People-Centered Development, 25th 29th July 2011, Abuja, Nigeria.
- 16) IEEE World Congress on Computational Intelligence, 18–23 July 2010, Barcelona, Spain.
- 17) IEEE 1st International Conference on Emerging and Sustainable Technologies for Power and ICT in a Developing Society, $17^{\text{th}} - 19^{\text{th}}$ June 2010, Abuja, Nigeria.
- 18) IEEE 2nd International Conference on Adaptive Science and Technology. 14th 16th Dec 2009, Accra, Ghana.

SERVICES WITHIN RIVERS STATE UNIVERSITY

- 1) Electrical Engineering Departmental Examination Officer (2004).
- 2) Member, Computer Engineering Curriculum Review Committee (2004).
- 3) Secretary, Departmental Committee to investigate the activities of Electrical Engineering Students' Association EXCO (2010).
- 4) Member, Computer Engineering Steering Committee (2011).
- 5) Member, Fund Raising Committee for Improvement of Electrical Engineering Departmental Facilities (2015).
- 6) Chairman, Electrical Engineering Department-Alumni Collaboration Committee (2016/2017).
- 7) Member, Computer Engineering Recovery Committee (2016/2017).
- 8) Member, Council/Senate Joint Selection Committee for the Appointment of a Bursar in Rivers State University (2016).
- 9) Member, Senate Ad-Hoc Committee on the Consideration of Application for Affiliation of Valley View Polytechnic, Ohafia, to Rivers State University, (2017).
- 10) University Delegate at the Nigeria Oil and Gas Industry Research and Development Exhibition Fair and Conference, in Lagos from $24^{\text{th}} - 28^{\text{th}}$ September 2017.
- 11) Member, University Academic Brief Implementation Committee (2017).
- 12) Member, Faculty of Engineering Office Space Allocation Committee (2018).

- 13) Member, Ad-Hoc Committee on Globacom Public Sector Enterprise Consultancy and Investment Proposal (2018).
- 14) Chairman, Computer Engineering Implementation Committee (2018/2019).
- 15) Member, Information and Communication Development Committee (ICTDC), Rivers State University (2019 Date).
- 16) Member, University Online Examination Implementation Committee (2020 Date).
- 17) Member, Rivers State University COVID-19 Enforcement Committee (2020 Date).
- 18) Chairman, Computer Engineering Department NUC Resource Verification Visit Committee (2020).
- 19) Chairman, Faculty of Engineering Conference Planning Committee (2020 Date).
- 20) Member, Rivers State University PGSA/SUG Election Petition Committee (2021 Date).
- 21) Chairman, Rivers State University Website Optimisation Committee (April 2022 Date).

OTHER SERVICES

- 1) External Examiner and Assessor, Captain Elechi Amadi Polytechnic, PH (2017 Date).
- 2) External Assessor, Ken Saro Wiwa Polytechnic, Bori (2017 2018).
- 3) Facilitator, National Open University of Nigeria, Port Harcourt Study Centre (2009 2015).
- 4) Chairman, Electoral Committee, Nigerian Society of Engineers, Omoku Branch (2016).
- 5) Internal Auditor, Nigerian Society of Engineers, Omoku Branch (2016).
- 6) Vice Chairman, Nigerian Society of Engineers, Omoku Branch, 2019 Date.
- 7) Treasurer, Nigerian Society of Engineers, Omoku Branch, 2017 2019.
- 8) Treasurer, Full Gospel Businessmen's Fellowship International, RSU Chapter (2017 Date).
- 9) Secretary, Education Board, St. Thomas' Anglican Church, Diobu, Port Harcourt (2018 Date).
- 10) Council Secretary, St. Thomas' Anglican Church, Diobu, Port Harcourt (2017 2020).
- 11) Patron, The Boy's Brigade Nigeria, Rivers State Council, ONELGA 1st Company (2020 Date).

HOBBIES

- \Rightarrow Travelling;
- \Rightarrow Socializing;
- \Rightarrow Reading;
- \Rightarrow Writing.

REFEREES

- ⇒ Engr. Professor C. O. Ahiakwo Department of Electrical Engineering Rivers State University, Port Harcourt
- ⇒ Engr. Professor D. C. Idoniboyeobu Head, Department of Electrical Engineering Rivers State University, Port Harcourt
- ⇒ Engr. Professor J. G. Akpa Dean, Faculty of Engineering Rivers State University, Port Harcourt