

THE FEDERAL POLYTECHNIC, OFFA
APPROVED FORMAT FOR CURRICULUM VITAE
ACADEMIC STAFF

A. NAME: (Underline Surname): JIMOH ABDULRAMON AROYEHUN

Age Next Birthday: 41

Department: ELECTRICAL & ELECTRONICS ENGINEERING

Date of First Appointment at Federal Polytechnic Offa: 11/03/2013

B. PRESENT STATUS

Present Salary: (Academic Staff, Lecturer I) CONPCASS 06/04

Date of present appointment: 01/01/2022

C. INSTITUTIONS ATTENDED UNIVERSITY/POLYTECHNIC EDUCATION (WITH DATES)

- | | |
|---------------------------------|-------------|
| a. University of Ilorin | 2013 – 2018 |
| b. National Teachers` Institute | 2011 - 2012 |
| c. University of Ilorin | 2001 – 2006 |

SECONDARY OR TECHNICAL EDUCATION (WITH DATES)

- | | |
|---|-------------|
| a. Alade college, Ajasse-Ipo, kwara State | 1999 – 2001 |
| b. Offa Grammar School, Offa, Kwara State | 1996 – 1999 |

PRIMARY EDUCATION (WITH DATE)

- | | |
|--|-------------|
| a. St. Cyprian Primary School, Offa, Kwara State | 1990 – 1995 |
|--|-------------|

D. ACADEMIC QUALIFICATION (WITH DATES)

- | | |
|--|------------------------------|
| a) M.ENG. (ELECTRICAL AND ELECTRONICS ENGINEERING) | June,2018. |
| b) Post Graduate Diploma in Education | |
| National teachers` Institute | 4 th June, 2013. |
| (Affiliated to Usman Danfodiyo University, Sokoto) | |
| c) Certificate of National service | |
| National Youth Service Corps | 5 th March, 2008. |
| d) B.ENG with second Class Honours | |
| (Upper Division) in Electrical Engineering | 3 rd Dec., 2006. |
| e) Senior School Certificate | June, 2001. |
| f) Certificate of primary education | June, 1995. |

E. SCHOLARSHIP AND PRIZES (AT UNIVERSITY, SECONDARY OR PRIMARY LEVEL) AWARDS:

- a) TETFund Institution-Based Research Grant (IBR): 19th September, 2017

- b) Islamic Development Bank Scholarship: June, 2003 to July, 2006
- c) Overall Best Student in JSS 1 at Anglican College of Commerce in 1996

F. TRAINING PROGRAMME ATTENDED (STATE PERIOD OF TRAINING AND COURSE TAKEN WITH DATES)

- a. 5-day training on International Certificate of Digital literacy (ICDL) modules: Presentation, ICT in Education, Online Collaboration and IT security; conducted by FOZY Global Concepts held from 24th -28th of August, 2020 at Federal Polytechnic Offa, Kwara State Nigeria.
- b. A Course on Let`s Break the Chain of COVID-19 Infection, conducted by The Mohammed Bin Rashid university of Medicine and health Sciences, as part of MBRU community Immunity Ambassador program on the 21st of April, 2021.
- c. One-day workshop on APPLICATION of MATLAB TO ENGINEERING MATHEMATICAL ANALYSIS, held at the Federal Polytechnic, Offa; on **9th Sept., 2014.**
- d. Workshop on Entrepreneurship Development and Curriculum Redesign for Sustainable Skill Acquisition and Self-Reliance held at Federal Polytechnic Offa on **12th April, 2013.**
- e. Teaching and Learning of New Concepts and Methods in UBE Curriculum conducted by Learn Africa Plc at Offa Grammar School, Offa on **19th June, 2012.**

G. HONOURS/DISTINCTIONS AND MEMBERSHIP OF LEARNED/ PROFESSIONAL SOCIETY

- a) Registered Electrical Engineer (R.51362), Engr., by The Council for the Regulation of Engineering in Nigeria (**COREN**) on the **12th September, 2019.**
- b) Member of The Nigerian Society of Engineers (**MNSE**), Registered Number **59734** on the **21st of July, 2022.**
- c) International Certificate of Digital Literacy (ICDL) in **Presentation**, conducted by FOZY Global Concepts held from 24th -28th of August, 2020. Sponsored by Tertiary Education Trust Fund (tetfund).
- d) International Certificate of Digital Literacy (ICDL) in **Information and Communication Technology (ICT) in Education**, conducted by FOZY Global Concepts held from 24th -28th of August, 2020. Sponsored by Tertiary Education Trust Fund (tetfund).

- e) International Certificate of Digital Literacy (ICDL) in **Online Collaboration**, conducted by FOZY Global Concepts held from 24th -28th of August, 2020. Sponsored by Tertiary Education Trust Fund (tetfund).
- f) International Certificate of Digital Literacy (ICDL) in **IT security**, conducted by FOZY Global Concepts held from 24th -28th of August, 2020. Sponsored by Tertiary Education Trust Fund (tetfund).

H. EXPERIENCE SINCE BASIC QUALIFICATION

❖ WORK EXPERIENCE AT FEDERAL POLYTECHNIC OFFA

- (a) Federal Polytechnic, Offa
 - Lecturer I: January 2023 – till date
 - Lecturer II: July, 2019 to December, 2022
 - Lecturer III: July: 2016 – June, 2019
 - Assistant Lecturer: March, 2013 – June, 2016
- (b) Degree Coordinator: August, 2022- till Date
- (c) HND PROJECT CORDINATOR: Sept., 2021 – July, 2022
- (d) DEPARTMENTAL EXAMINATION OFFICER: APRIL, 2019 – Sept, 2021
- (e) Reviewer for Nigerian Journal of Technology (NIJOTECH), www.nijotech.com. **2021 till Date.**
- (f) Reviewer for Nigerian Journal of Technological Development (NJTD), www.njtd.com.ng, currently indexed in Google Scholar, Scopus, African Journals Online (AJOL), Directory of Open Access journals (DOAJ), DRJI. A quarterly publication of Faculty of Engineering & Technology, University of Ilorin, Ilorin, Nigeria. **June, 2021- till date**
- (g) Adjunct lecturer, Federal University of Technology, Minna, Directorate for Collaborations, Affiliations and linkages, in affiliated Institution (Federal Polytechnic Offa). <http://www.futminna.edu.ng/cal>. **26th of May, 2021.**
- (h) Adjunct lecturer, Federal Polytechnic Offa in Affiliation with Federal University of OYE-EKITI, Directorate of Affiliate Degree programmes and Industrial collaborations
- (i) Delegate of Academic Staff Union of polytechnics, Federal Polytechnic Offa Chapter for the 16th National Delegates Conference held at Event Hall, Orchid Hotels Asaba. **6th - 10th of December, 2021.**
- (j) Member of Conference Committee for the 6th National Engineering Conference (ETPANISC 2022) organised by School of Engineering and Technology, The Federal Polytechnic, Offa. Year 2022

- (k) Secretary of Sub-committee on Accreditation Exercise (Management liaison/Finance/Linkages). August, 2020
- (l) **Project Co-ordinator** from **JULY, 2017 – March, 2019**
- (m) Entrepreneurship Courses: Appointment as Trainer, 23rd October, 2015
- (n) Departmental Staff Recorder from **Jan., 2015 – June, 2017**

❖ **PREVIOUS WORK EXPERIENCE**

Physics Lecturer – School of Preliminary studies, A' level Cambridge Centre, Offa, kwara State: **April, 2008 – October, 2011**

- Responsible for preparing learning materials
- Responsible for the Departmental Administrative task
- Involved in the set-up of exams
- Providing mentoring, advice and support to students.
- Involved in recruitment exercise

I. RESEARCH INTEREST & COMMISSIONED PROJECTS COMPLETED

- (a) Electrical Machine and Power System
- (b) Renewable Energy System
- (c) Artificial Intelligence and Internet of Things
- (d) Modelling and Simulation of Solar Power System
- (e) Installation of Low Voltage Distribution Power Line at the Department of Electrical and Electronics Engineering, Federal Polytechnic Offa, Kwara State, Nigeria (2021).
- (f) Installation of Solar Powered street Lighting at the Department of Electrical and Electronics Engineering, Federal Polytechnic Offa, Kwara State, Nigeria (2018).

J. PUBLICATION (TEXTBOOKS)

- (a) JIMOH, A.A. (2022) Electrical Power System, published by Ahlan Wasah-Lan Printing Press, Offa, Nigeria
- (b) JIMOH, A.A. (2023) Electrical Machine, published by Ahlan Wasah-Lan Printing Press, Offa, Kwara State, Nigeria
- (c) Chapter Contribution in Circuit Theory (2025), Published by Ahlan Wasah-Lan Printing Press, Offa, Kwara State, Nigeria

K. JOURNALS

- [1] **Development of Wavelet Transform Algorithm for Fault Identification and Classification in Power System Network.** *ASUP Journal of Innovative Research and Technology: Vol. 3, ISSUE 1, April 2024 (PP.1-10), ISSN:2682-5031*
- [2] **Internet of Things based Vehicle Tracking with GPS and Cloud Integration: A study on Real-Time Monitoring and Analytics.** *The Scale: An Interdisciplinary Journal of The ACADEMIC STAFF UNION OF POLYTECHNICS-ZONE D, ISSN:2992-3727, 25th May, 2025.*
<https://thescalejournal.com.ng/>
- [3] **Design and Deployment of Internet of Things based Weather Station for Real-Time Monitoring of Environmental Conditions.** *International Journal of Earth Design and Innovation Research; Vol. 03 No. 4- January, 2024; E-ISSN: 1116-2759.*
- [4] **Investigation of Technical Feasibility and Efficiency of Wi-Fi Based Internet of Things Remote Monitoring and Control of Home Appliances.** *International Journal of Science Research and Technology; Vol. 6 No. 9; E-ISSN 3026-8796, P-ISSN 3026-8095.*
- [5] **Contingency Analysis of Transmission Line Outage in a 9-Bus Power System using Power World Simulator.** *International Journal of Engineering Processing & Safety Research (IJEPSR), published by Cambridge Research and Publications; Vol. 24 No. 5; pp 195-206; March, 2022; ISSN-2339-7310(print).*
www.cambridgenigeriapub.com
- [6] **Enhancement of Second Level Automated Teller Machine Authentication using Radio Frequency identification and Fingerprint.** *International Journal of Engineering and Technology Research(IJETR) published by Cambridge Research and publications; IJETR ISSN-2329-7309(print); Vol. 21 No. 5; June, 2021; pp. 63-71.*
- [7] **A Short-Term Load Forecasting Using Artificial Neural Network: A case Study of Ganmo 132/33Kv Transmission Sub-Station.** *ASUP Journal of Innovative Research and Technology (AJIRT), A publication of Academic Staff Union of Polytechnics Federal Polytechnic Offa Chapter, Vol. 2 Number 2; December, 2020; pp. 146-152.*
- [8] **Electricity Load Forecasting Using Cubic Regression.** *The Edifice: Journal of Generic Academia, The Federal Polytechnic, Offa; Vol. 9 No. 1, January, 2021; pp.11-17.*

- [9] **A Review of Smart Grids Deployment Issues in Developing Countries.** *Arid Zone Journal of Engineering, Technology and Environment*, December, 2017; Vol. 13(6):858-867. www.azojete.com.ng.
- [10] **Modelling of Photovoltaic Module for output performance prediction in heterogeneous weather conditions.** *ASUP Journal of Innovative Research and Technology, a Publication of Federal Polytechnic Offa Chapter*, 2019.
- [11] **Sizing of Wind powered Axial Flux Permanent Magnet Alternator Using Analytical Approach.** *Nigerian Journal of Technology (NIJOTECH)*, Vol.35, No.4, October 2016, pp. 919-925. www.nijotech.com

L. MAJOR CONFERENCES ATTENDED WITH PAPER READ/SEMINAR PAPERS

- [1] **Real-Time Monitoring and Predictive Analytics of Electric Vehicle Battery using IoT and Machine Learning @ the SETiCON 2025 on Sustainable Innovation: A pathway for Modern Science, Engineering and Smart Technology; 12th -14th May, 2025 held at Federal Polytechnic Offa, Kwara State, Nigeria.**
- [2] **Development of a Modified Incremental Conductance Algorithm with Adaptive Step Size for Fast Tracking of Maximum Power Point in Photovoltaic System @ the 1st ASUP Multidisciplinary National Conference on Emerging Trends in Agriculture Development, Technology, Business Management and Entrepreneurship Development in Contemporary Nigeria: A catalyst for Industrial Development; 27th -29th November 2024.**
- [3] **Development and Implementation of SMS/VOICE –based Home Automation System using Google Assistant @ the 1st ASUP Multidisciplinary National Conference on Emerging Trends in Agriculture Development, Technology, Business Management and Entrepreneurship Development in Contemporary Nigeria: A catalyst for Industrial Development; 27th -29th November 2024.**
- [4] **Efficient Power Control: Optimizing Energy Management in PhotoVoltaic Hybrid Battery-Super Capacitor Energy Storage System @ the 7th Biennial Conference of ASUP Zone D at Akwa Ibom State Polytechnic, Ikot-Osurua on Polytechnic Sector Reforms in Nigeria; Critical Issues and Way Forward; 5th -7th February, 2025.**
- [5] **Data-Driven Approach for Electricity Theft Detection in Advance Metering System using Smart Meter Data @ the 7th Biennial Conference of ASUP Zone D at Akwa Ibom State Polytechnic, Ikot-Osurua on Polytechnic Sector Reforms in Nigeria; Critical Issues and Way Forward; 5th -7th February, 2025.**

- [6] **Development of Fault Detection and Classification in Power System using Radial Basis Neural Network @ the 2nd ASUP International Multi-Disciplinary Conference on Exploring Local Discoveries in Science, Technology and Vocational Research: A panacea for Industrial Development and Economic Growth in Nigeria held on 25th -26th April, 2024 at Federal Polytechnic, Ekowe, Bayelsa State, Nigeria.**
- [7] **Development of Machine Learning based Algorithm for Weather Prediction using Sensor Data from IoT Weather Station @ the 1st International Conference on Artificial Intelligence (AI) organized by ICONIC OPEN UNIVERSITY in Collaboration with SOKOTO STATE UNIVERSITY AND MINISTRY OF INNOVATION & DIGITAL ECONOMY SOKOTO STATE conducted from 17th - 18th February, 2024 at International Conference Center Sokoto.**
- [8] **IoT Based 12V Battery Monitoring System with ESP8266 @ the 4th National Conference, Academic Staff Union of Polytechnic (ASUP) Federal Polytechnic Offa Chapter on Digitalization for sustainable Economic Development held between 21st and 24th August, 2023 at Stella Obasanjo Hall, Mini Campus, Federal Polytechnic Offa.**
- [9] **Development and Implementation of IoT based Solar Power Monitoring System @ the 4th National Conference, Academic Staff Union of Polytechnic (ASUP) Federal Polytechnic Offa Chapter on Digitalization for sustainable Economic Development held between 21st and 24th August, 2023 at Stella Obasanjo Hall, Mini Campus, Federal Polytechnic Offa.**
- [10] **Design and Simulation of Adaptive Neuro-Fuzzy Inference System based Boost Converter using MATLAB Software @ the Usman Danfodio University Academic Conference 2024 on Transformation agenda for Third World Communities in Evolving as Global Developed Nation: Multidisciplinary Approach held between 27th and 29th February, 2024 at Usman Danfodio University, Sokoto, Sokoto State, Nigeria.**
- [11] **Development and Implementation of Internet of Things Based Energy Meter @ the International Virtual Conference on Recent Trends in Technology: Transformative Solution in Education, Management, Sciences for National Economic Growth and Sustainability, organized by Empirical Studies and Communication Development (A Research Centre) UYO, Akwa Ibom State, Nigeria, held between 8th and 9th July, 2025.**
- [12] **6th National Conference on Engineering and Technology: Panacea to National Insecurity and Socio-Economic Recovery in a Post COVID-19 World (ETPANISC) ,2(1): 24th -26th May, 2022, held at Federal Polytechnic Offa, Kwara State, Nigeria:**

Maximum Power Point Tracking using Incremental Conductance Algorithm for Optimal Performance of Solar Photovoltaic System.

- [13] 25th Multidisciplinary Academic Conference Proceedings of Mediterranean Research and Publications, International on Sub-Sahara African Sustainable Development: Multidisciplinary Approach, Vol. 25 No. 1, 29th April, 2022; pp. 65-73; University of Maiduguri, Borno State, Nigeria: **Development and Implementation of Global System for Mobile Communication based Home Automation.**
- [14] 8th National Conference of the School of Applied Sciences and Technology, held at the Federal Polytechnic, Offa, Kwara State, Nigeria, 23rd – 25th of November, 2021: **Development of Fingerprint based Student's Attendance Management System using Arduino.**
- [15] 3rd SET Annual International Conference 2021 [SAINCONF 2021] on Engineering and Innovation Technology; held at Federal Polytechnic Ede from 8th – 11th November, 2021. www.setridc.com : **Optimal Dispatch of Power Generation by Iterative Technique using Gradient Method.**
- [16] 5th National Academic Conference 2021, Academic Staff Union of Polytechnics Zone “C” held at Federal Polytechnic Offa, Kwara State, August 3rd - 6th 2021: **Modelling and Simulation of Perturb & Observe Maximum Power Point Controller for Photovoltaic System.**
- [17] 5th National Academic Conference 2021, Academic Staff Union of Polytechnics Zone “C” held at Federal Polytechnic Offa, Kwara State, August 3rd - 6th 2021: **Camera-Based Yoruba Document Reader: STE –Based Solution to Limitations of Concatenative Synthesis.**
- [18] 1st International Conference (Virtual), Academic Staff Union of Polytechnics(ASUP) Nigeria, held at Federal Polytechnic, Offa Chapter; 13th – 15th of October, 2021: **Short Term Load Forecasting using Artificial Neural Network: A Case Study of Ganmo 132/33kV Transmission Sub-Station.**
- [19] Proceedings of the 20th Academic Conference on Transformation Agenda for Third World Communities: Multidisciplinary Approach. Vol. 21, No. 1; 30th April, 2020; held at 1000 Capacity Hall, Abubakar Tafawa Balewa University, Yelwa Campus ATBU, Bauchi, Bauchi State, Nigeria. www.africanscholarpub.com : **Covid-19: Leveraging Dynamic Spectrum Access for Enhanced wireless communication during lockdown.**
- [20] 5th National Conference on Impact of Technological Advancement on Economic Diversification and Development in Nigeria, School of Engineering, held

at Federal Polytechnic, Offa, Kwara State, Nigeria, 1(1): 334-341; 26th – 28th Feb, 2018. newtonjournalsoe.fpo.edu.ng : **MATLAB-Based Program for Solar Cell Internal Parameters Extraction.**

- [21] 5th National Conference on Impact of Technological Advancement on Economic Diversification and Development in Nigeria, School of Engineering, held at Federal Polytechnic, Offa, Kwara State, Nigeria, 1(1); 26th – 28th Feb, 2018. newtonjournalsoe.fpo.edu.ng : **Modelling of Photovoltaic Module for Output Performance Prediction in Different Weather Conditions.**
- [22] 7th National conference on Science, Technology and Entrepreneurship: Bedrock for Economic Transformation and Solution to Youth unrest, School of Applied Science and Technology, held at Federal Polytechnic, Offa, Kwara State, Nigeria, 20th -22nd Nov., 2018: **Sizing of Battery-Based Solar Power System using MATLAB software.**

M. COMMUNITY DEVELOPMENT

- (a) **Member, OLOWONSOKE/ NAWAIR-UD-DEEN Vigilante Group (2020), Offa, Kwara State, Nigeria.**

N. REFEREE

- Prof. Nazmat Surajudeen Bakinde
Department of Electrical & Electronics Engineering,
University of Ilorin, Ilorin, Nigeria
deenmat@unilorin.edu.ng
- Prof. Abdulrahman Yusuf. A.
Electrical & Electronics Engineering Department, University of Ilorin,
Ilorin, Nigeria.
dareyyusuf@unilorin.edu.ng
- Omeiza Avazi, PhD (Electrical Engineering, Telecommunications) Electrical & Electronics Engineering Department, University of Ilorin, Ilorin, Nigeria.