

# OLUWAPEMIISIN G. AKINGBOLA

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## ACADEMIC PROFILE

### Morgan State University, USA

August 2023-Dec 2024

*Masters of Science, Electrical & Computer Engineering (Signals Intelligence) (GPA 4.0)*

*Courses: Advance Network Security, Advanced Network Communications, Advanced Project Management*

### University of Ibadan, NG

Feb 2015 - Mar 2021

*Bachelor of Science, Electrical Engineering (CGPA 3.7/4.0)*

## WORK EXPERIENCE

### National Science Foundation (#1915614) — IT Research Assistant & Data Analyst

Aug 2023-Jan 2024

- Led smart system integrations to boost STEM education in HBCUs, using experimental pedagogies
- Managing the project database and communicating through data visualizations and analytical research papers
- Presented findings to academic stakeholders, highlighting the impact of smart system integration on improving educational outcomes, through clear and compelling data visualizations and detailed analytical reports.

### Schneider Electric — Projects Engineer

Feb 2023 - July 2023

- Led data-driven management of large-scale energy distribution projects across the Middle East and Africa, focusing on safety, efficiency, and sustainability through data insights.
- Analyzed energy project sales data using BFO and Tableau, identifying trends and opportunities to enhance project delivery and market penetration.

### Center for Information and Telecoms Engineering — IT Research Assistant & Data Analyst

Aug 2021 - May 2022

- Led a research team in the analysis of telecommunications and drone-aviation data, leveraging advanced analytics to derive actionable insights and improve system efficiencies.
- Organized and led workshops on advanced Data and Machine Learning skills, including TensorFlow, for students and professionals, enhancing their analytical capabilities and industry readiness

### Aviat Networks, Lagos, Nigeria — Microwave Engineering Intern

Aug 2018 - Feb 2019

- Created and strategized Microwave Network Links for three regions in Nigeria, configuring a range of microwave radios.
- Supervised more than 200 Enterprise Network Systems for two Network Service Providers.

## PUBLICATIONS

- Engaging university students in practical physics labs through motivational active learning (accepted abstract and publication submitted- ASEE 2024)
- Comparative Study of Digital Electronics Learning: Using PCB Versus Traditional Methods in an Experiment-Centered Pedagogy (ECP) Approach for Engineering Students (accepted abstract and publication submitted- ASEE 2024)

## RESEARCH PROJECT

- Set up a VPC within AWS and Simulated a DoS attack using Hping3 to flood a target server with SYN packets, demonstrating the impact on service availability.
- Implemented a Virtual Local Area Network (VLAN) to enhance home network security and optimize DNS filtering. Using pfSense as a firewall and router, integrated Pi-hole on a Raspberry Pi for DNS filtering. Configured network devices to segment network traffic, ensuring secure communication between devices. This setup significantly reduced unwanted advertisements and potential phishing threats, enhancing overall network security.

- Developed an innovative smart wireless device aimed at analyzing gait patterns in the elderly population of Sub-Saharan Africa, enhancing mobility and reducing fall risk. Applied advanced data analytics to interpret gait data, enabling early detection of mobility issues and personalized healthcare interventions.

## LEADERSHIP EXPERIENCE & AWARDS

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| • Lead, Sector 256 Hub   | September 2023      |
| • Chairperson, <i>Women in Engineering, IEEE (UISB)</i>                | Oct 2018 - May 2020 |
| • President, <i>Bowels of Mercy, University of Ibadan (Non-profit)</i> | 2018-2020           |
| • <i>IEEE Smart Village-AWG (Telehealth Team Designer)</i>             | 2020-2022           |
| • Seed for the Future in IT, Award                                     | 2019                |

## CERTIFICATIONS

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- AI, Robotics and Data Training (Global AI Hub)
- IBM Cybersecurity Tools and Attack Training
- AWS Cloud Practitioner Essentials
- Schneider Electric Systems Tendering Certified

## SKILLS

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**Data and Analytic Tools:** Jupyter Notebook, Tableau, Google Colab, SPSS, Excel.

**Programming:** Python, C program. **Web Technologies:** HTML, CSS, Javascript, WordPress.

**Frameworks:** Tensorflow, Numpy, Matplotlib, GitHub, VS Code, Canvas.

**Networking Tools:** Wireshark, Arduino, Raspberry pi, AWS Cloud, Operating Systems MacOS and WindowsOS.

**Others:** VHDL, Microcontrollers, AutoCAD.