

IBRAHEEM ADEKUNLE OLAJIRE

Career Summary

Result-oriented Electrical Engineer with a proven track record in electrical system design, analysis, maintenance and implementation across power systems and power electronics manufacturing. Adept at translating theoretical knowledge into practical solutions, with a strong analytical mindset and attention to detail. Known for ensuring compliance with industry and safety standards while leveraging innovative technologies to enhance system performance and efficiency.

EDUCATION

- North Carolina A&T State University
 - Obafemi Awolowo University, Ile-Ife, Nigeria
- M.Sc. in Electrical Engineering

B.Sc. in Electrical & Electronic Engineering
- May 2025

GPA: 4.00

GPA: 3.32

Skills

- Electrical Engineering:** EMS, DMS, PSSE, PowerWorld Simulator, NERC CIP, Silvaco TCAD, CADENCE, LABVIEW, MATLAB, Verilog/VHDL, JMP, Linux, PLC
- Coding:** Python, C++, C, SQL, HTML, CSS, Verilog/VHDL
- Electrical Design Tools:** AutoCAD, SolidWorks, Revit

PROFESSIONAL EXPERIENCE

- North Carolina A&T State University, Greensboro, NC (Graduate Research Assistant)

August 2023 – May 2025

 - Conducting research on the Design of high on-off ratio GaN HEMT for low voltage applications with a focus on improving **power system efficiency**
 - Supported undergraduate lab sessions guiding students in using test equipment (oscilloscopes, multimeters) for **electrical circuit analysis**.
 - Tutored over 30 students in **Electric Power** Principles, VLSI, and Semiconductor Device Physics focusing on grid stability, **power quality**, and **renewable energy integration**

Intel In-RELPS Commercial Leap Ahead for Wide (CLAW) Bandgap Semiconductors summer program at JSNN (Power Electronics Intern)

June 2024 – July 2024

- Received training in physical vapor deposition (PVD) and photolithography equipment for semiconductor fabrication processes.
- Trained in cleanroom safety measures and gowning procedures.
- Participated in JMP software and statistics courses focused on industrial problem-solving, statistical analysis, and data visualization.
- Collaborated with fellow students on research involving the design of high electron mobility transistors (HEMTs) using Silvaco TCAD software for simulation.

- Electricity National Control Center (NCC) (Power System Engineer)

January 2020 - August 2023

 - Optimized real-time control, **maintenance**, and **monitoring** of a 3x1500KVA gas-powered generation plant and load-shedding operations at a 132/33KV **switchyard**, ensuring seamless performance and reliable **power distribution**.
 - Conducted **system planning**, **electrical design**, and **power flow studies** using **PSSE** to enhance the reliability and efficiency of **transmission systems**.
 - Performed **power systems protection** tests, including the installation and configuration of **power breakers** and **relays** on **transformers**, and generated monthly reports on fault analysis, **power outages**, and equipment damage assessments.
 - Collaborated with the **SCADA** department to **design** data collection strategies and analyze operational data from generating stations for improved **grid** performance.

LEADERSHIP AND VOLUNTEER EXPERIENCE

- President, Electrical Engineering Students’ Society, Obafemi Awolowo University
- Member, Nigerian Society of Engineers (NSE)
- Member, Electrical Power Club

PROJECT AND RESEARCH EXPERIENCE

- Designed and implemented a smart traffic light system at ILab.
- Developed an elevator door monitoring system.
- Utilized Verilog Design styles (Dataflow, structural, and behavioral) to design a 4-bit full adder.
- Created a smart control switch using an Esp32 MCU and ThinkSpeak.
- Designed RF Amplifier.

CORE COMPETENCIES

Time Management	Presentation Skills	Strong Analytical Thinking
Team Collaboration	Public Speaking	Attention to Details
Leadership	Communication Skills	

CERTIFICATIONS

- Silvaco for Semiconductor Device and Process Simulation (Udemy)
- **Power system Analysis** (Cousera-offered by the University of Illinois)
- Lean Six Sigma Green Belt