

EBUBECHUKWU (RAYMOND) MOKOLO

Graduate Electrical & Electronics Engineer

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PROFESSIONAL SUMMARY

Graduate Electrical & Electronics Engineer with an MSc Distinction from the University of Leicester and a BEng Second Class from Afe Babalola University. Specialising in Power Systems, Embedded Systems, IoT and PCB Design. Proven ability to design, install and commission electrical systems; create technical drawings in AutoCAD Electrical and EPLAN Electric P8; and perform load calculations and power distribution design. IEEE Student Member seeking graduate or junior Electrical Engineering roles across the UK.

KEY SKILLS

Electrical Design <ul style="list-style-type: none">AutoCAD ElectricalEPLAN Electric P8Circuit Design & AnalysisLoad Calculations & Cable Sizing	Power Systems <ul style="list-style-type: none">Power Distribution DesignPower ElectronicsProtective RelayingHigh-Voltage Systems	Embedded Systems <ul style="list-style-type: none">Embedded C / C++Arduino, STM32, PICMicrocontroller ProgrammingMATLAB / Simulink
PCB & Hardware <ul style="list-style-type: none">PCB Design (KiCad/Altium)Schematic CaptureMultisimSoldering & Prototyping	IoT & Software <ul style="list-style-type: none">IoT Protocols & Wi-Fi ModulesPythonGitHub / GitSOLIDWORKS / AutoCAD Plant 3D	Professional Skills <ul style="list-style-type: none">Technical DocumentationProject ManagementStakeholder CommunicationAnalytical Problem-Solving

PROFESSIONAL EXPERIENCE

Full Stack Web Developer

Aug 2023 – Sep 2024

MBZTECHNOLOGY · Full-time | Nigeria (On-site)

- Led a cross-functional team of 5 to design and deliver scalable software systems, applying systems engineering principles including requirements analysis, modular design and iterative testing.
- Integrated third-party APIs and payment systems, demonstrating strong problem-solving and technical communication skills directly transferable to engineering project environments.
- Produced structured technical documentation and status reports, improving team delivery consistency.

Full Stack Developer

May 2022 – Nov 2023

NIIT · Full-time | Warri, Nigeria (On-site)

- Designed, built and delivered software solutions within a structured technical team to meet client specifications.
- Applied systematic debugging and performance optimisation methodologies, building strong analytical skills applicable across engineering disciplines.
- Gained experience translating technical requirements into delivered solutions, improving stakeholder communication.

Electrical Engineering Intern

Apr 2021 – Apr 2022

Nigerian Television Authority (NTA) · Full-time | Ogun State, Nigeria

- Assisted in the installation, testing and maintenance of electrical and broadcast transmission systems.
- Prepared and repaired basic wiring diagrams; supported senior engineers in fault diagnosis and repair of electrical equipment.
- Gained hands-on exposure to power distribution systems, safety standards and electrical maintenance in a live broadcast engineering environment.
- Received NTA Corporate Commendation Letter for performance and dedication.

Electrical Engineering Technician

Jul 2019 – Dec 2020

Voltson Engineering & Consulting Limited · Apprenticeship | Warri, Nigeria (On-site)

- Supported the design and development of electrical products for multiple industries, including feasibility studies for new product concepts.

- Assisted in preparing technical documentation, including user manuals, specification sheets and process piping design documents.

Electrical Engineering Intern

Jan 2019 – Jul 2019

NNPC Limited · Internship | Warri, Nigeria (On-site)

- Supported the design, testing and maintenance of electrical systems for industrial oil & gas applications at NNPC's facility.
- Created detailed electrical drawings and schematics using AutoCAD; assisted with load calculations and cable sizing for industrial power distribution.
- Collaborated with multidisciplinary teams to ensure project delivery in compliance with IEEE and IEC safety standards.
- Gained direct exposure to high-voltage systems, protective relaying and instrumentation in a live industrial environment.

Electrical Engineering Intern

Jun 2016 – Sep 2016

Department of Petroleum Resources (DPR) · Internship | Nigeria

- Supported preventive maintenance and inspection activities for electrical systems in a petroleum industry regulatory environment.

EDUCATION

MSc Electrical and Electronics Engineering (Distinction)

Sep 2024 – Nov 2025

University of Leicester

- Specialised modules in Power Systems, Embedded Systems, Control Engineering and Digital Signal Processing.
- Deep Learning with MATLAB certified; course representative for the department.
- Key MSc research: EEG-Based Machine Learning Framework for Parkinson's Disease Classification (presented at Leicester Med Week 2025).

BEng (First Class) Electrical and Electronics Engineering

2015 – 2020

Afe Babalola University (ABUAD)

- IEEE Student Chapter member; participated in robotics design workshops and renewable energy research.
- Member of Engineering Students' Association (ESA) and Robotics & Automation Club; contributed to STEM outreach via Community Development Service.

KEY PROJECTS

Autonomous Line-Following Robot

2024–2025

University Robotics Competition | University of Leicester

- Designed and built an autonomous robot using PID control algorithms, infrared sensors and DC motor drivers for smooth path tracking.
- Designed the PCB control circuit and wrote embedded C firmware for the microcontroller, demonstrating hands-on control systems and embedded programming skills.

Smart Home Automation System

2023–2024

Arduino-Based IoT Project | Independent

- Designed a full IoT home automation system using Arduino microcontrollers, enabling remote monitoring and control of lighting, temperature and security appliances.
- Implemented PIR motion, temperature/humidity and light sensors; developed embedded C firmware for real-time data acquisition and control logic.
- Integrated relay control circuits and wireless communication via Wi-Fi modules.

CERTIFICATIONS & MEMBERSHIPS

- AutoCAD Electrical Certification – Autodesk
- Deep Learning with MATLAB Certificate – University of Leicester / MathWorks
- IEEE Student Member – Institute of Electrical and Electronics Engineers
- NSE Certificate – Nigerian Society of Engineers
- HSE Certificate – Health, Safety & Environment