

Randy Kofi Ansah

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CAREER PROFILE

Randy is an innovative, detail-oriented and dedicated individual with a strong passion for electrical engineering who possesses a multifaceted skill specializing in the design, maintenance, automation and instrumentation of high voltage distribution and transmission systems. His career revolves around upholding electrical quality assurance standards, guaranteeing reliable power delivery and optimizing efficiency. With a proven track record of innovation and technical excellence, I am committed to advancing electrical infrastructure for a sustainable and connected future. Randy is always looking for opportunities to learn and grow in the field of electrical engineering.

EDUCATION

University of Energy and Natural Resources
Program: BSc Electrical and Electronic Engineering

Sunyani, Bono Region
Sep 2018 - Oct 2022

Aggrey Memorial A.M.E Zion Senior High School
Program: General Science

Cape Coast, Central Region
Sep 2014 - May 2017

CERTIFICATES/ ACHIEVEMENTS / AWARDS

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| • Student Inventor of the Year, GHIE Eminence Awards, UENR | 2022 |
| • Energy Production, Distribution and Safety Specialization, University of Buffalo, Coursera | Sep 2023 |
| • Power System: Generation, Transmission and Protection Specialization, L&T EduTech, Coursera | Jul 2023 |
| • A Practitioner's Approach to Power Distribution & Automation Specialization, L&T EduTech, Coursera | Jul 2023 |
| • Google Project Management Specialization, Google, Coursera | Jun 2022 |
| • Engineering Project Management Specialization, RICE University, Coursera | Apr 2022 |
| • Introduction to Sustainability, University of Illinois at Urbana-Champaign | Apr 2022 |
| • Top 14 Teams Finalist, Ocean Challenge, Team AQUA AI, Garage48 | Apr 2022 |
| • Hultprize Competition Semifinalist, UENR, Sunyani | Feb 2022 |
| • Electric power Systems, University of Buffalo, Coursera | Jan 2022 |
| • Electric Industry Operations and Markets, Duke University, Coursera | Jan 2022 |
| • GMES Competition, Project Curiosity Team, 1st Runner Up | Nov 2021 |
| • Enactus National Competition, Project Management team member, 2 nd Runner up | Sep 2021 |
| • Dean's Tech Challenge, 1 st Runner Up | |

PROJECTS

INDCON: Industrial systems control using gestures Jan 2023

- Built a microcontroller system that controls industrial processes by the use of gestures
- It incorporates a camera to take real-time video feeds of gestures to perform certain factory processes

FINAL YEAR PROJECT: Distribution Network Reconfiguration using Genetic Algorithm Oct 2022

- Implemented an automatic loss reduction system taking a 33 and 69 bus system as a case study using MATLAB.
- The system performs load flow analysis on the network and reroutes power to reduce power loss
- The system supports the introduction of Distributed Generators in the network system

WORK EXPERIENCE

- Graduate Electrical Engineering Trainee, Electricity Company of Ghana, Accra** Nov 2022 - Present
- Designed a technical submittal review checklist reducing time taken by 60%, while reducing review errors by 100%
 - Increased the rate of defect detection during factory acceptance tests while ensuring compliance with contractual agreements and specifications
 - Reduced rate of failure of equipment by 80% through preventive maintenance with the help of my colleagues
 - Designed a maintenance report format making it more detailed and concise
- Electrical Engineer Intern, Anointed Electrical Engineering Services Ltd, Accra** Oct 2021 - Dec 2021
- Designed a 5v power system circuit, Astable, and nonstable circuits to control equipment reducing power consumption by 60%
 - Assisted Electrical and electronic engineers in troubleshooting and repair of equipment
- Information Technology Engineer Intern, White Cross Chemicals, Accra** Sep 2020 - Dec 2020
- Sensitized users on best practices of using hardware peripherals and software applications reducing malfunctions by 50%
 - Developed a stock management system to keep digital records of inventory.
- Electrical Engineering intern, Electricity Company of Ghana, Accra** May 2020 - Jun 2020
- Developed an inspection checklist and standard operating procedures reducing downtime of equipment by 50%.
 - Assisted electrical field engineers in conducting load balancing tests reducing transformer damage and power surges.
- Voluntary Teacher, Carobells Academy, Bortianor** May 2017 - May 2018
- Increased the computer literacy rate of students by 90%.
 - Encouraged creative thinking and motivated students by addressing individual strengths and weaknesses based on standardized syllabus.

LEADERSHIP EXPERIENCE

- Head, Mechatronics Interest Group, Institute of Mechanical Engineers, UENR** Oct 2021 - Oct 2022
- Successfully organized the inception and inauguration of the mechatronics interest group on campus
 - Managed a team of over 50 students to learn and equip themselves with skills revolving around robotics, embedded systems, and IoT.
- Vice President, UENR Robotics Club, University of Energy and Natural Resources** Sep 2021 - Oct 2022
- Chaired an 8-member committee vetting the club's executive aspirants.
 - Successfully led a team from the club to win the National Energy Innovation Competition with the help of my colleagues
 - Managed a team of over 50 students to learn and equip themselves with skills revolving around robotics, and the Internet of Things
- Public Relations Officer, UENR Robotics Club, University of Energy and Natural Resources** May 2020 - Sep 2021
- Increased the club's social media followers by 400%.
 - Improved information dissemination through social media and represented the club at interviews.

TECHNICAL SKILLS

- Softwares: AutoCAD, AutoCAD Electrical, MATLAB, Simulink, Multisim, Revit, Dialux, Microsoft Office Suite, CYME
- Programming Languages: Python, SQL, C++
- Proficient in PLC, SCADA, and DCS systems
- Proficient in Data Science, Machine learning, Artificial Intelligence, Robotics and Embedded systems

VOLUNTEER ACTIVITIES

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| • Facilitator, Wan Hive Robotics Drive, UENR, Sunyani | Aug 2022 |
| • Facilitator, World Engineering Day, UENR, Sunyani | Mar 2022 |
| • Facilitator, STEM festival, UENR, Sunyani | Aug 2021 |
| • Facilitator, GHIE skills fair, UENR, Sunyani | Mar 2021 |
| • Facilitator, Electrical and Electronics Department Arduino Workshop, UENR, Sunyani | Jan 2021 |
| • Facilitator, Science fair, University of Energy and Natural Resources, UENR, Sunyani | Feb 2020 |

HOBBIES AND INTEREST

- Research, Electrical Quality Assurance, Project Management, Maintenance and Troubleshooting, High Voltage System Design, Volunteering, Green and Sustainable System Design, Carbon Accounting