

KWAME DONKOR

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EDUCATION & CERTIFICATIONS

University of Washington, Seattle, WA

September 2023 – June 2027 (Expected)

Doctor of Philosophy, Electrical and Computer Engineering (ECE)

- Current GPA: **3.98**
- Relevant coursework (through Spring 2025): Power Systems Analysis, Sustainable Energy & Global Development, Power Systems Dynamics and Protection, Wind Energy, Power System Economics.

Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

September 2013 – June 2017

Bachelor of Science, Electrical/Electronic Engineering

- GPA: **3.92**; First Class Honours; Top 5% of graduating class; **Provost's Excellent Student Award** (two years).
- Relevant coursework: Substations and Transmission Line Design, High Voltage Engineering, Power Systems Operation and Control, Industrial Automatic Control.

Project Management Institute, Certified Project Management Professional

February 2022 – February 2028

TECHNICAL PROFICIENCIES

- **Relevant Software:** Python, PowerWorld, AutoCAD Electrical, Siemens TIA Portal, Rockwell RSLogix 5000, Dialux Evo, EPlan Electric, *Helioscope*, SAM, Microsoft Word, Microsoft Excel, Microsoft Project

SUMMARY OF QUALIFICATIONS

- Experienced in applying data analytics and geospatial techniques to interdisciplinary power grid reliability research.
- Strong foundation in electrical systems design, installation, and troubleshooting with expertise in low and medium voltage equipment.
- Proficient in renewable energy technologies, including the design and deployment of solar PV systems for both grid-tied and off-grid contexts.
- Demonstrated ability to work collaboratively in interdisciplinary teams.

RELEVANT EXPERIENCE

Teaching & Research Assistant, Interdisciplinary Energy Analytics for Society Lab, University of Washington, Seattle, WA

September 2023 – Present

- Conducting research to investigate the intersection of grid resilience of power systems, weather events and climate vulnerability in Sub-Saharan Africa through rigorous data analytics and multiple scenario analysis.
- Facilitated lab sessions for a class of 25 students and explained core photovoltaic (PV) concepts such as maximum power point tracking, DC to AC conversion and simulation of various power grid system scenarios using PowerWorld.
- Supported course instruction by preparing & editing lab standard operating procedure (SOP) documents and grading lab reports.

Automation & Controls Engineer, Process and Plant Automation Ltd

September 2017 – June 2023

- Directed field teams on electrical and automation projects, including the installation and commissioning of residential & large-scale solar PV systems, PLC and MCC panels, medium and low voltage transformers & switchgear, fire suppression systems, and soft starter systems.
- Configured, tested, and commissioned a 33kV, 2MW solar PV system with a SCADA monitoring system and 33 grid-tied inverters, achieving in an annual savings of \$576K for a leading agro-processing company.
- Led a team of 15 in installing over 4,000 LED fixtures and 99 smart meters across six institutions, enabling remote energy monitoring as part of an \$800K energy efficiency initiative spearheaded by a government agency.
- Conducted troubleshooting and maintenance of electrical systems, enhancing operational efficiency of client processes.
- Prepared detailed as-built drawings, technical reports, and documentation to ensure accurate project closeout and ease of future maintenance.

AWARDS / FELLOWSHIPS

Cascade Energy Scholarship, Renewable Energy Scholarship Foundation (RESF)

April 2025

ADDITIONAL EXPERIENCE

Team Leader (Quileute Tribal School), STEM Alternative Spring Break Program, University of Washington, Seattle, WA

January 2025 – Present

Research Mentor, Summer Undergraduate Research Program, University of Washington, Seattle, WA

July - August 2024

Professional Engineer, Ghana Institution of Engineering, Accra, Ghana

August 2022 – Present

Vice President of Operations, Hospital Visitation Ministry, Agape House New Testament Church, Accra, Ghana

January 2020 - June 2023