

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

AmeriCorps Student Fellow, Washington Campus Coalition For the Public Good

January 2025

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