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1. EDUCATION

<u>DATE</u>	<u>INSTITUTION</u>	<u>CERTIFICATE</u>
January 2023	New Mexico State University	PhD Electrical Engineering(ongoing)
2015- 2018	University of Energy and Natural Resource	MSc. Sustainable Energy Management
2011- 2013	Kwame Nkrumah University of Science and Technology (KNUST)	Commonwealth Executive Master of Business Administration (EMBA)
2004-2008	Kwame Nkrumah University of Science and Technology (KNUST)	BSc. Electric/Electronic Engineering
2001-2003	Opoku Ware School	Senior Secondary School Certificate

2. OTHER PROFESSIONAL QUALIFICATIONS

June, 2015	Energy commission, Ghana	Certified Electrical Wiring Professional (CEWP), Commercial division
July, 2014	University of Energy and Natural Resource/DENG	Off-grid solar PV Installation
July, 2020	Huawei Academy	Huawei Networking Certification-Instructor division
August 2022	Energy Commission	Certified Energy Auditor

3. MEMBERSHIP OF PROFESSIONAL BODIES

- Ghana institution of Engineers (GhIE)
- Certified electrical wiring professional Association of Ghana
- University Teachers Association of Ghana (UTAG)
- Student Member, IEEE
- President, NMSU Ghana Students Association, 2023-2024 academic year

4. Employment Records & Positions Held/Hold (with dates):

Period	Employing organization; title/position.	Summary of activities performed relevant to the Assignment
June 2024- to date	New Mexico State University Job Title: <i>Graduate Research Assistant</i>	<ul style="list-style-type: none"> • Research on renewable energy integration in power systems. • Electricity markets
Jan- May 2023	New Mexico State University Job Title: <i>Graduate Teaching Assistant</i>	<ul style="list-style-type: none"> • Preparation of practical laboratory for undergraduates • Grading undergraduate assignments and lab work • Assisting undergraduates in capstone project • Tutorial for students
December 2018 to Date	University of Energy and Natural Resources	<ul style="list-style-type: none"> • Teaching Engineering Students • Supervise undergraduate students • Conducting Research

	Job Title: <i>Lecturer (currently, on study leave)</i>	<ul style="list-style-type: none"> • Undertaking Outreach Activities. • Academic counselling
July 2013-December 2018	Glo mobile Ghana Job Title: <i>Area Technical Head</i>	<ul style="list-style-type: none"> • Supervision of other contractors. I.e. passive and other civil or installations on the network • Random/periodic site visits to perform upgrades. • Installation of battery banks • Prepare weekly report on the performance of the network in terms of site outages, causes and give recommendations and subsequently implement changes to minimize downtime hours.
January 2011-December 2013	Reime Ghana Limited Job Title: <i>Manager/Technical Head, Northern Zone</i>	<ul style="list-style-type: none"> • Installation of microwave antennas • Maintenance of deep cycle battery back ups • Preparing link budget for microwave links. • Installing and maintaining PV for cell sites
October 2009-December 2010	Melicom Ghana Limited Job Title: <i>Area Radio Engineer</i>	<ul style="list-style-type: none"> • Planned/unplanned maintenance of equipment. • Fine tuning microwave links • Maintaining satisfactory conditions of sites • Maintenance of battery backups and rectifiers • Installing new batteries and rectifiers

5. SOFTWARE COMPETENCY

- SAM, ETAP,
- OpenDSS,
- PSS/E, Hommer,
- Autocad,
- Helioscope,
- PowerWorld,
- Matlab,
- Python,
- Julia

6. SELECTED PUBLICATIONS

- J. Ansu, F. Wang and Di Shi “Impact Assessment of Synthetic Inertia and Demand Response on Unit Commitment in Electricity Markets” North American Power Symposium, 2024”
- Techno-economic challenges of pumped hydro energy storage, ISBN 9780128188538, <https://doi.org/10.1016/B978-0-12-818853-8.00011-X>.
(<https://www.sciencedirect.com/science/article/pii/B978012818853800011X>)
- ‘Pumped hydro Energy Storage for Hybrid Systems’
(<https://books.google.com/books?hl=en&lr=&id=zd9CEAAAQBAJ&oi=fnd&pg=PP1&ots=w73kO-9LN5&sig=y6LoiI5dOtbDn2jzqetA38Ctlhw#v=onepage&q&f=false>)
- Assessment and modelling electricity demand response potential in Ghana, a case study of Sunyani Municipal. (MSc. Thesis submitted to the graduate school, University of energy and Natural Resources in 2018)
- Ansu Gyabaah, J., & Owusu-Afriyie, P. “A Review of Electricity Market Reforms and Regulations in Ghana” Volume 5, Issue 11, November – 2020 International Journal of Innovative Science and Research Technology ISSN No: -2456-2165
- Gyabaah, J. A., Twumasi, E. and Gyamfi, S. (2021). Saving Electricity in an emergency, experiences from some countries and lessons for Ghana. ADRRI Journal of Engineering and Technology, Ghana: Vol. 5, No. 3 (4), Pp. 1-16, E-ISSN: 2026-674X, 31st December 2021

7. CONFERENCE ATTENDED/ PRESENTATIONS

- Rural electrification and feasibility of solar home systems for rural households in northern Ghana. In proceedings of 51st Annual conference of Ghana Institution of Engineers (GhiE)
- IEEE Conference on emerging trends on circuit design, 2019
- Renewable Energy fair, 2019
- Huawei ICT /networking training, 2020
- ICEASSM conference, 2019
- AGI Energy Service center training of trainers' workshop on RE and EE, 2020
- Presentation at New Mexico State University Research and creativity week, February 2024 (Multi-Scenario analysis of unit commitment considering demand response and synthetic inertia in electricity markets)
- WERC Environmental design contest award winner (3RD PLACE)
- EUMP conference 2024
- North American Power Symposium, 2024, presented a research article titled: "Impact Assessment of Synthetic Inertia and Demand Response on Unit Commitment in Electricity Markets"

8. RESEARCH INTEREST

- Power systems optimization
- Electricity markets
- Renewable energy
- Demand response
- Application of ML and AI in power systems

9. REFEREES

- **Fengyu Wang, PhD**
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