

JOHN GYAMFI

M.Eng., B.Eng., Student Member OACETT

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PROFILE

Skilled Electrical Engineering professional (M.Eng., B.Eng., EE Technician, Student Member OACETT) with extensive combined international and Canadian experience spanning power distribution, hands-on field maintenance, and industrial control systems. Proven expertise in troubleshooting PLC schematics, conducting field instrumentation audits, maintaining high-voltage distribution networks, and leading technical crews under strict safety standards. Adept at bridging complex engineering design with hands-on technical execution, from building electrical systems and commissioning to utility operations and 24/7 emergency response.

SUMMARY OF QUALIFICATIONS

- Strong knowledge of Electrical Power Systems including Motor Control Centers, Variable Frequency Drives, Transformers, and Distribution Panels
- Install and wire conduit, cable tray, panels, and electrical equipment
- Troubleshoot faults, complete repairs, and perform preventive maintenance
- Test and commission systems using a multimeter, insulation (megger) testing, and start-up procedures
- Follow Canadian Electrical Code compliance, LOTO, and safe work practices on every job

RELATED EXPERIENCE

Electrical Engineering Co-op Student

Jan 2026 – Apr 2026

Nylene Canada ULC – Arnprior, ON

- Reviewed, revised, and expanded complex PLC control schematics and installation layouts to ensure 100% strict drawing accuracy before field execution.
- Conducted rigorous field audits of plant instrumentation to identify design gaps, generating actionable data and documentation to bring installations into full compliance.
- Led the design and wiring of control cabinets, verified relay connections against schematics, and validated functional integrity to guarantee safe system commissioning.
- Designed secure power supply systems for water treatment equipment (pumps, VFDs) utilizing Canadian Electrical Code (CEC) standards to ensure safe operational sizing.
- Digitized operational procedures for a 1 MW generator, directly improving data accessibility and operator tracking efficiency.

RELEVANT COURSE PROJECT EXPERIENCE – ALGONQUIN COLLEGE

Electrical Principles I & II

Winter/Spring 2025

- Assembled, tested, and troubleshoot electrical circuits and equipment to meet given specifications
- Applied instrumentation techniques to verify and maintain circuit functionality
- Configured cabling, grounding, and bonding requirements for various circuit applications

Electromagnetic Control (EMC)

Spring 2025

- Installed and troubleshoot static and rotating electrical machines and associated control systems
- Analyzed and assembled control systems, applying fault-finding techniques under simulated industrial conditions

Programmable Controllers (PLC)

Fall 2025

- Programmed and troubleshoot control systems using PLCs for automated industrial processes
- Interpreted and produced electrical drawings to support control system design and implementation

Robotics and Controls

Spring 2026

- Will assemble, test, and troubleshoot electrical/electronic circuits within robotics control systems
- Will apply commissioning and testing procedures to robotics and control system builds

Industrial Instrumentation

Spring 2026

- Will use, verify, and maintain instrumentation equipment across industrial systems
- Will select and configure equipment/components to meet system specifications

Industrial Telecommunications

Spring 2026

- Will install, test, and troubleshoot telecommunication systems
- Will assist in commissioning and troubleshooting electrical power systems

Senior Electrical Works Superintendent

Sept 2015 – Dec 2020

University of Professional Studies – Accra, Ghana

- Directed high-voltage utility upgrades on campus, successfully coordinating the installation of 2 new distribution transformers, servicing of 2 existing transformers, and preventative maintenance of 3 standby generators.

- Supervised and scheduled a team of 5 field electricians executing installations, fault-finding, and repairs, improving operational reliability and minimizing system downtime.
- Managed contractor planning, tracked project milestones, and authored comprehensive technical progress reports to ensure on-time, safe project delivery.
- Maintained stringent quality control over all electrical components and materials, rejecting non-compliant hardware to guarantee strict adherence to electrical safety codes.

Apprentice Electrician

July 2008 – June 2015

Frontpage Electrical and Construction Engineering Works – Accra, Ghana

- Analyzed and interpreted engineering drawings, schematic diagrams, and technical formulas to verify that installations met strict reliability and quality standards.
- Assisted in completing complex domestic, commercial, and industrial wiring installations according to design specifications.

Electrical Internship

June 2012 – July 2013

Electricity Company of Ghana (ECG) – Accra, Ghana

- Assisted utility technicians in executing repairs on overhead electrical distribution lines to safely restore power and resolve system faults.
- Supported distribution network reliability by assisting in erecting electric poles and replacing High Rupturing Capacity (HRC) fuses for feeder pillars under strict safety supervision.
- Performed essential field duties, including the safe loading, organizing, and dressing of cables used for jumper terminations on the distribution grid.

OTHER EXPERIENCE

Produce Clerk

Apr 2022 – Present

Metro Ontario Inc. – Ottawa, ON

- Directed daily, high-volume floor operations and coordinated 3–5 staff members per shift to consistently meet critical operational targets.
- Enforced strict health, safety, and sanitation compliance protocols, maintaining full audit readiness and continuous alignment with strict regulatory standards.

EDUCATION

Diploma in Electrical Engineering Technician

Aug 2026

Algonquin College – Ottawa, ON

Master of Engineering (Electrical & Computer Engineering)

May 2022

University of Ottawa – Ottawa, ON

Bachelor of Engineering (Electrical & Electronic Engineering)

June 2019

Accra Institute of Technology – Accra, Ghana

TRAINING & CERTIFICATIONS

Student Member

May 2026 – Present

Ontario Association of Certified Engineering Technicians and Technologists (OACETT)

Process Control Valve

Feb 2026

Laurentide, Canada

Canadian Electrical Code Essentials (STO)

Apr 2022

CSA Group, Canada

Construction and Maintenance Electrician (Skilled Trades Ontario)

Eligible for Certification of Qualification; 9,000 hrs of verified trade experience completed.

VOLUNTEER

Volunteer Electrical Engineering Assistant

Aug 2026

Canarector Foundation - Algonquin College Skills Summer Camp

- Co-led a workshop for 15 middle and high school students (Grades 8–10), guiding them through basic electrical wiring practices and hands-on control of a robotic arm using PLC programming.
- Enforced strict workplace health and safety protocols and Personal Protective Equipment (PPE) requirements in the lab, ensuring 100% injury-free execution during circuit wiring and automated equipment operations.