

Bannaga Altieb Abdul Muhsin

Electrical Project Engineer — Riyadh, Saudi Arabia

Telecom & industrial passive infrastructure · Energy optimization · O&M
excellence

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[Contact Me](#)



Professional Summary

A Certified Energy Manager (CEM®) and Certified Measurement & Verification Professional (CMVP®) with over a decade of experience in electrical and energy engineering. I specialize in project management, telecom power systems, energy-efficient solutions, and technical operations across diverse infrastructure environments. With strong expertise in data collection, energy analysis, facilities management, and structured reporting, I have delivered innovative, reliable, and performance-driven solutions for complex engineering projects. I hold a bachelor's degree in Electronic Control Engineering and additional certifications in LEED Green Associate, SCADA systems. Fluent in both English and Arabic, I am committed to driving operational excellence, improving system reliability, and delivering measurable results through disciplined engineering practices.

Overview

12+

Years of
Professional
Experience

12

15+

Certifications &
Training Programs

15

AI & Development

AI & Automation

- Designed Python-based automation to streamline energy performance reporting and KPI tracking.
- Developed machine-learning-based anomaly alerts for telecom site power consumption behavior.
- Built governance-ready Energy & Environmental dashboards for CO₂ footprint monitoring.
- Applied Power BI, SQL Server, and DAX to model operational trends across multi-site networks.

Development & Tools

- Created troubleshooting guides and reusable diagnostic scripts for SCADA / PLC / DCS systems.
- Documented API-style checklists to standardize field data capture and site integrations.
- Version-controlled documentation and templates using Git/GitHub workflows.

Key Accomplishments

- Reduced nationwide telecom site utility costs by up to 18% through multi-phase energy optimization.
- Delivered O&M coverage for STC COW & Mobily ENM networks with proactive outage prevention.
- Authored troubleshooting guides and automation routines reducing incident resolution time by 30%.

- Commissioned 60+ MV/LV assets under SEC unified contracts with full SCADA integration.
- Developed an AI-driven Energy & Environmental Dashboard tracking CO₂ emissions and power efficiency across STC COW sites.

Experience

● 2019 – Present

Electrical Project Engineer — ACES | Riyadh

- Energy Manager & efficiency designer.
- O&M Engineer for Mobily ENM Managed Services.
- O&M Engineer for STC COW Managed Services.
- Developed technical troubleshooting & maintenance documentation.
- Improved telecom passive infrastructure performance.
- Mentored junior engineers.

● 2018 – 2019

Electrical Project Engineer — Absar | Riyadh

- Executed SEC unified-contract builds for 60+ MV/LV assets.
- Installed RMUs, transformers, and mini-pillars.
- Full commissioning & SEC handover.
- SCADA monitoring & integration.

● 2017 – 2018

Electrical Engineer — BEMCO

- Preventive maintenance for 11kV distribution networks.
- Developed standardized testing & inspection manuals.
- Handled NCR resolutions & technical documentation.

● 2012 – 2017

Electrical Engineer — SEC Thermal Generation (Sudan)

- Operations for 200 MW thermal generation block.
- Wastewater treatment (PH meters / OC 4000 DCS).
- Maintenance for 11kV distribution systems.

Key Projects

STC COW Network – O&M + energy optimization.

Mobily ENM Managed Services – Full O&M and facility support.

Mobily Data Center Energy Audit – Energy efficiency assessment.

SEC Unified Contract – MV/LV installations & SCADA commissioning.

PP12 Thermal Generation – Operations & safety routines.

Education

B.Sc. Electronic Engineering (Control)

El Neelain University – 2007–2012

Skills

- Microsoft Office
- Power BI
- SQL Server
- Figma AI Programming & Development
- Energy Managements Tools
- SCADA / DCS / PLC

Certifications

- CMVP®
- CEM®
- Machine Learning with Python
- Power BI Essential Training
- Cert Prep: LEED Green Associate
- Learning Excel: Data Analysis
- The Non-Technical Skills of Effective Data Scientists
- Quality Engineering
- SCADA / PLC / DCS / RTU

Memberships

- Saudi Council of Engineers (SCE)
- Sudanese Engineers Association (SEA)

Languages

- Arabic — Native
- English — Professional

Work Availability

- Sunday–Thursday: 8:00 AM – 6:00 PM
- Weekends: On-call for urgent interventions
- Ready for short-notice regional travel

Hobbies & Interests

- | | |
|----------------------------|-----------------------------|
| • Electrical Power Systems | • Energy Efficiency |
| • Automation | • Data Analysis |
| • Innovation | • Learning New Technologies |

"You never change things by fighting the existing reality. To change something, build a new model that makes the old one obsolete."

— R. Buckminster Fuller

2025 Eng. Bannaga Altieb Abdul Muhsin