Abigael Kalunde Sila

Profile

Motivated Electrical Engineering student eager to build on the skills acquired during my degree studies and previous experiences. Diligent, reliable, and deeply grounded in engineering principles, I have horned my expertise in SCADA system operations and power infrastructure management. My proficiency ranges from fault diagnosis and troubleshooting to effective collaboration in procurement and administrative tasks, consistently contributing to streamlined operations and improved safety. I am committed to driving innovation and reliability in every project I undertake.

Education

Bachelor of Engineering
Electrical and Electronics Engineering
Mai University

Moi University January 2021 - Present

- Member Technology Students Association(TSA)
- Related coursework:
 - Power systems
 - Electrical machines
- Kenya Certificate of Secondary Education

Asumbi Girl's High School February 2016 – November 2019

Attained the grade A- (77 points)

Kenya Certificate of Primary Education

One Hill's Academy January 2008 – November 2015

- Switchgear and protection
- Electrical power

Experience

Electrical Engineering Intern Kenya Railways, Nairobi SGR May 2024 – August 2024

- **Power Infrastructure Maintenance:** Conduct routine inspections, maintenance, and repair of power lines, transformers, generators, switch gear and distribution boxes across substations and passing stations.
- **Power Line Inspection:** Perform inspections of power lines and substations to ensure integrity and safety, addressing faults and damage as needed.
- SCADA System Operation: Utilize SCADA systems for real-time monitoring and control
 of power supply, including mastering the switching sequence for transferring power
 between substations.
- Fault Diagnosis and Repair: Identify and troubleshoot electrical faults, including issues
 with electrical wiring, lights, sockets, fuses and circuit breakers, and perform necessary
 repairs.
- **Equipment Procurement:** Purchase critical ensuring proper specifications and handling.
- Administrative Support: Assist in sorting and arranging financial documentation, and support office activities e.g. tender processes.

Skills

Technical Skills

- SCADA System Operation: Proficient in using SCADA systems for monitoring real-time data and controlling power supply, including understanding the switching sequence for coupling substations.
- 2. **Fault Diagnosis and Troubleshooting:** Skilled in diagnosing and repairing electrical faults, such as issues with electrical wiring, lights, sockets, fuses and circuit breakers. Capable of performing thorough fault analysis and corrective actions.
- 3. **Power Infrastructure Maintenance**: Experienced in the maintenance of box-type transformers, unmanned transformer stations, and power distribution boxes. Knowledgeable in routine maintenance and repair procedures.
- 4. **Generator Maintenance:** Knowledgeable in inspection and purchasing of batteries, understanding specifications, and ensuring proper equipment usage.
- 5. **Design Plan Interpretation:** Familiar with reading and interpreting design plans for 11kV and 33kV transformer cabinets.

Office skills

- 1. **Data Management:** Skilled in organizing and handling various forms and documents, such as advance and claims forms.
- 2. **Financial Management:** Experienced in managing budgets, tracking expenses, and handling financial transactions for equipment purchases.
- 3. **Administrative Support:** Developed strong skills in sorting and organizing paperwork, assisting with office tasks, and helping keep office operations running smoothly.
- 4. **Team Collaboration:** Worked well with engineers, technicians, and other staff, helping to complete projects successfully and solve problems together.
- Customer Service: Built good relationships with vendors and suppliers while purchasing equipment, showing strong people skills.

Software skills

- Mobile App Development: Certified in mobile app development by Meta, proficient in building mobile applications using Kotlin and React Native. Skilled in designing user interfaces (UI/UX) with Figma, ensuring intuitive and responsive app experiences.
- Front-End Development: Certified in front-end development by Meta, with strong
 expertise in creating dynamic, responsive websites using HTML, JavaScript, CSS, and
 React. Experienced in designing website interfaces (UI/UX) using Figma to enhance
 user interaction and visual appeal.
- Data Structures & Algorithms: Knowledgeable in data structures and algorithms, with the ability to apply these concepts in both app development and front-end projects to optimize performance and efficiency.

People skills

- · Adaptive reasoning
- Synergy
- Fun and energetic

- Strategic resolution
- Poised under pressure
- Adaptability

Achievements

- 1. **Power Supply Management:** Played a crucial role in maintaining a continuous and reliable power supply across essential SGR substations, directly contributing to uninterrupted railway operations.
- 2. **Electrical Fault Resolution:** Spearheaded the diagnosis and rapid resolution of electrical faults, effectively preventing potential service disruptions and ensuring operational stability.
- Infrastructure Maintenance Leadership: Led the maintenance and inspection of power infrastructure, taking charge of safety protocols and significantly enhancing the operational efficiency of substations.
- 4. **Substation Operations:** Successfully managed complex power switching sequences between substations, strengthening system resilience and minimizing downtime risks.
- Maintenance Operations Optimization: Orchestrated the optimization of maintenance procedures
 by strategically coordinating efforts between internal teams and external suppliers, leading to
 improved efficiency and resource utilization.

Referees

ENG. ISAAC KISENGESE Senior Engineer Kenya Railways

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