
IBRAHIM BABAGANA MUHAMMAD

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PROFESSIONAL SUMMARY

- Detail-oriented Mechatronics Engineering student with a solid mechanical and electronic systems foundation.
- Hands-on experience in routine maintenance, industrial equipment servicing, and ensuring safety compliance.
- Proficient in using diagnostic tools, managing inventory, and maintaining a clean working environment.
- Demonstrated ability to follow instructions and work efficiently under supervision.
- Skilled in problem-solving, communication, and maintaining high standards in maintenance operations.
- Eager to leverage technical expertise and practical experience in a dynamic engineering role.

WORK HISTORY

Intern (Maintenance Department), 04/2024 – 08/2024

Abuja Furniture Production, Julius Berger Nigeria, (AFP-JBN) - ABUJA, FCT

- Conduct routine maintenance and servicing of industrial equipment, such as water booster stations and air compressors, ensuring optimal performance and longevity.
- Drain and refill pressure tanks with air to maintain correct pressure levels and system efficiency.
- Perform electrical maintenance tasks, including replacing Miniature Circuit Breakers (MCBs) to match load requirements and prevent system failures.
- Diagnose and troubleshoot malfunctions in machinery, such as CNC machines and circular saw cutting machines, identifying and resolving issues to minimize downtime.
- Use diagnostic tools like Digital Multimeters (DMM) to check electrical continuity and ensure proper connections.
- Repair and reconnect critical safety components, such as emergency stop buttons, to restore operational functionality.
- Perform regular maintenance, including cleaning filters and coils, inspecting systems, and refilling refrigerant.
- Diagnose and repair issues with electrical, mechanical, and refrigerant components using diagnostic tools.
- Install and manage cable wiring from industrial distribution boxes to machine power supply panels, and from panels to various machine components, ensuring neat and safe routing using cable trays, racks, and clips.
- Ensure proper connection and organization of cables to components such as motors, air extractors, and lighting systems.
- AC Installation: Install AC units in various settings, ensuring proper placement, secure mounting, and initial functionality.

- Adhere to all safety protocols and guidelines to prevent electrical hazards and ensure a safe working environment.
- Conduct final checks and tests after maintenance or repair work to confirm the proper functioning of machinery and systems.
- Maintain accurate records of maintenance tasks, repairs, and inspections.

Intern (Spectrum Administration), 07/2023 - 10/2023

Nigerian Communications Commission (NCC) - ABUJA, FCT

- Assisted in the coordination and management of radio frequency spectrum allocation.
- Conducted data analysis to support spectrum planning and policy development.
- Assisted in monitoring and ensuring compliance with spectrum regulations.
- Supported senior engineers in preparing reports and documentation for spectrum management activities.
- Participated in meetings and training sessions to enhance understanding of spectrum administration.
- Any other duties that may be assigned by the Director (Spectrum Administration)

Intern (Network Maintenance), 08/2019 - 01/2020

Rahza Technology Limited - ABUJA, FCT

- Assist in Development Projects: Worked closely with the development teams to contribute to designing and coding a website for a client.
- Support System Administration: Assisted in maintaining and optimizing technology infrastructure, including troubleshooting hardware and software issues.
- Learning and Development: Actively participated in conducting training sessions, workshops, and knowledge-sharing activities to enhance technical skills and stay current with industry best practices.

SKILLS

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| • Proficient in diagnosing and repairing on safety machinery and equipment. | industrial <input type="checkbox"/> Strong attention to detail with a focus protocols and compliance standards. |
| • Skilled in electrical maintenance, cable <input type="checkbox"/> management, and electrical installation. | Excellent problem-solving abilities, capable of working independently or in a team. |
| • Experienced in AC installation, maintenance, repair. and documentation. | <input type="checkbox"/> Effective communication skills for reporting and |
| • Strong customer service skills and | proficiency in using diagnostic tools. |

EDUCATION

Bachelor of Engineering: Mechatronics Engineering – In view (CGPA 4.51)

Nile University of Nigeria - Abuja, FCT

West African Senior School Certificate Examination – 2019 (2-A1, 5- B3, 2C4)

Fouad Lababidi Islamic Academy - Abuja, FCT

Certificate of Higher Education: HCIA-Datacom V1.0 Course, 2024 Huawei Technologies Co., Ltd.

Certificate of Higher Education: FEM - Linear, Nonlinear Analysis & Post Processing, 2024 Coursera Project Network

RESEARCH PUBLICATIONS

- Review on Implementation of Automatic Packing Machine System based on PLC
Nile Journal of Engineering and Applied Science (NJEAS) · Jan 31, 2025
(<https://doi.org/10.5455/NJEAS.197217>)
- Using Mechatronics to Facilitate Manufacturing Processes
2023 2nd International Conference on Multidisciplinary Engineering and Applied Science
(ICMEAS) · Jan 5, 2024 (<https://ieeexplore.ieee.org/document/10379366>)

ACCOMPLISHMENTS

- Successfully restored functionality to multiple critical machines, minimizing downtime and ensuring continuous operation.
- Improved system efficiency and longevity through regular maintenance and timely repairs.
- Installed and maintained numerous AC units, ensuring optimal performance.
- Ensured safety and compliance in all activities, maintaining a clean and hazard-free work environment.
- Diagnosed and repaired electrical, mechanical, and refrigerant components, enhancing system reliability.
- Supported senior engineers in preparing reports and documentation for spectrum management activities.
- Conducted data analysis to aid in spectrum planning and policy development.
- Assisted in monitoring and ensuring compliance with spectrum regulations.
- Contributed to the design and coding of a client website, enhancing technical skills.
- Assisted in maintaining and optimizing technology infrastructure and troubleshooting hardware and software issues.
- Actively participated in training sessions, workshops, and knowledge-sharing activities to stay current with industry best practices.

AFFILIATIONS

- Student Member Nigerian Society of Engineers (NSE), Abuja- 2022
- Fellow Nigerian Universities Engineering Students Association (NUESA) - 2023
- Student Member Nigerian Institute of Electrical and Electronics Engineering (NIEEE), - 2023
- Student Member Society of Petroleum Engineers (SPE) - 2022

LANGUAGES

English

Kanuri

Fluent

Native

Hausa

Arabic

Native

Conversational

REFEREES:

1. Assoc. Prof. Opeyemi Osanaiye
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