BAABA-YAKUUB ABDUL-MUUMIN

Kumasi/Accra, Ghana | +233 54 679 3304 | baabayakuub@gmail.com|
https://www.linkedin.com/in/baabayakuub

EDUCATION

Kwame Nkrumah University of Science & Technology, Kumasi, Ghana — Jan 2021 – Sep 2024

Bachelor of Science in Petroleum Engineering

SKILLS

TECHNICAL SKILLS: PYTHON PROGRAMMING, MACHINE LEARNING, DATA VISUALIZATION, TECHNICAL DATA ANALYTICS, QUALITY CONTROL, REGULATORY COMPLIANCE, CONTROL ROOM, MAINTENANCE MANAGEMENT

SOCIAL SKILLS: TEAM LEADERSHIP, TEAM COORDINATION, IMMENSE ORAL/WRITTEN COMMUNICATION, DEEP LISTENING/ATTENTION, FAST LEARNER, ADAPTABLE

WORK EXPERIENCE

Petroleum Operations Intern

Bulk Oil Storage and Transportation Co. (BOST), Kumasi, Ghana — Nov 2023 – Jan 2024

- Assisted in managing oil storage and transportation operations, contributing to a 10% reduction in operational delays.
- Conducted quality control tests, ensuring 100% compliance with industry standards, improving product reliability.
- Supported routine inspections, reducing equipment downtime by 15%.
- Collaborated with cross-functional teams, optimizing processes, resulting in a 7% increase in operational efficiency.

SPE Student Member

Kwame Nkrumah University of Science & Technology, Kumasi, Ghana — Jan 2022 – Aug 2024

- Conducted outreach programs at 16 high schools in Kumasi, providing educational sessions on petroleum engineering to inspire future engineers and promote interest in the field.
- Delivered hands-on workshops to coursemates, focusing on the application of machine learning in the petroleum industry, improving their understanding of emerging technologies.
- Tutored peers in essential engineering subjects, including Differential Calculus, Reservoir Engineering, Petrophysics, and Well Testing, contributing to an overall improvement in academic performance.
- Facilitated collaborative learning sessions to support fellow students in mastering complex industry-relevant topics.

PROJECTS

Integrated Field Development Project - Vic Bilh Oil Field Evaluation

- Conducted a comprehensive evaluation of reservoir and well deliverability using PROSPER software, achieving an oil production rate of 22,933 STB/day.
- Performed sensitivity analyses leading to optimized well design, maximizing flow rates with an optimal tubing size of 5 inches.
- Integrated seismic and well data for reservoir modeling, aiding in the identification of hydrocarbon traps.

Comparative Study of Machine Learning Algorithms for Predicting Oil Formation Volume Factor (Bo)

- Collaborated on a study comparing ML models (ANN, RF, DT, SVR, GB) with empirical correlations for predicting Bo.
- Processed a dataset of 221 observations and utilized feature scaling and correlation analyses.
- Achieved the best performance using ANN, with an MSE of 0.0011, an R^2 of 0.985, and an AAPD of 4.20%, improving prediction accuracy significantly.