SETH AYUMU
(BSc. Mech Eng)
Edmonton, AB, Canada

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EDUCATION
University Of Alberta, Edmonton AB   **September 2023 – April 2025**
- Master of Engineering Degree, Petroleum Engineering expected in July 2025
- **Projects:**
  - **A Data Mining Approach to Assess Field Scale CO2 EOR and Sequestration Performance Correlated to Geological and Reservoir Characteristics:** Preseted at the SPE Canadian Energy Technology Conference and Exhibition 2025
  - **Supply Chain Optimization for DAAB Inc.**: Developed a cost-optimization model using LINDO, resulting in a more efficient supply chain network with potential cost savings of up to 15%
  - **Reservoir Characterization of The Volve Field:** Analyzed production data to characterize the subsurface reservoir, providing valuable insights for improving resource extraction strategies
  - **Gas Lift System Design:** Used PIPESIM to simulate a well and design a gas lift system, significantly enhancing production efficiency and optimizing well performance.
  - **Multiphase Flow Simulation:** Implemented the Drift Flux Model using MATLAB to accurately simulate multiphase flow through production pipes, enhancing the understanding of fluid dynamics in petroleum production
  - **Reservoir Simulator Development:** Created a custom reservoir simulator using MATLAB to model fluid flow phenomena through porous media, contributing to advanced predictive capabilities in reservoir engineering
- Member of Interdisciplinary Consulting Association

University For Development Studies, Tamale, Ghana   **September 2017–July 2021**
- Bachelor of Science Degree, Mechanical Engineering (4.3 CGPA)
- Led an educational outreach program to rural communities, demonstrating adaptability, problem-solving, and impactful communication by directly benefiting over 1,000 individuals
- Managed budget and strategic funding allocation as Finance Committee Chair of the Student Regpresentative Council. Led budget management and strategic funding allocation, showcasing leadership, analytical thinking, and effective team coordination

WORK EXPERIENCE
Data Management Specialist — Freelance
Akuapem North Municipal Assembly, Akropong— Ghana   **September 2022−August 2023**
- Developed an innovative building permit applications data management system, applying critical problem-solving skills to enhance service speed by 10× and reduce paper use by 80%.
- Improved record-keeping accuracy by over 90%, ensuring data integrity and operational efficiency.

Customer Service Associate & Administrative Assistant (Ghana National Service Personnel)
Akuapem North Municipal Assembly, Akropong— Ghana   **October 2021 −August 2022**
- Streamlined administrative workflows by initiating a user-friendly database system to reduce errors and processing time
- Delivered efficient customer service, improving client satisfaction through proactive communication and team collaboration

CERTIFICATIONS
- PMP® Certification Training (December 2023), Gold Standard Certifications
- Diploma in Supply Chain Management (March 2023), Alison

PROFESSIONAL DEVELOPMENT
Aspire Institute, Virtual   **March 2023–October 2023**
- Selective academic and professional development program for first-generation college students with applicants from over 100 countries
- Coursework completed includes a virtual leadership course, live interdisciplinary academic sessions and professional development workshops with Harvard Business School faculty members
- Developed a growth mindset and leadership abilities while collaborating in a global, multidisciplinary environment
- Leveraged skills in problem-solving and effective communication to gain insights from members of the Harvard Business School Faculty during live case study sessions

SKILLS
- Web Application Development in Python (Front-end & Back-end) using Django   • Data Analysis and Visualization
- Artificial Lift Design   • Nodal Analysis of Oil and Gas Systems   • Well Log Interpretation and Formation Evaluation
- Well Test Analysis   • Excel VBA Programming   • Reservoir Simulation   • LINDO

COMMUNITY/PERSONAL
- Volunteer with the Canadian Red Cross at the HELP Depot
- Enjoy reading non-fiction. **_Outliers_** remains my most impactful read