SAMUEL ELI SETSOFIA

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EDUCATION

Northwestern University | Evanston, Illinois

December 2025

Artificial Intelligence (MSc)

 Relevant Coursework: Advanced Machine Learning, Deep Learning, Natural Language Processing, Computer Vision

University of Ghana | Accra, Ghana

July 2020

Biomedical Engineering (BSc)

• Thesis: Design of a First Aid Device for Reducing Blood Loss and Measuring Vitals in Postpartum Haemorrhage Patients

WORK EXPERIENCE

IRC WASH Systems (Contract) | Rotterdam, Netherlands

May 2023 - May 2024

AI Chatbot Engineer Intern

- Achieved 70% user interaction for training over 2000 WASH professionals on the IRC Learning Academy
- Demonstrated exceptional technical proficiency by employing large language models, RAG and semantic search techniques, enhancing chatbot's performance and user engagement
- Developed tokenization and chunking strategies for over 100 IRC published WASH related research papers and stored in CozoDB

Nyaho Medical Centre | Accra, Ghana

October 2020 - January 2022

Biomedical Engineer Intern

- Engineered an innovative electronic booking system, reducing equipment downtime by 30% and improving operational efficiency
- Created and maintained a medical equipment maintenance database for ~500 medical equipment/devices including mobility devices, aggregating data from multiple sources
- Spearheaded training of 120 physicians and physician assistants in good practices of medical equipment use, cutting down equipment breakdown time to 50%

SKILLS SUMMARY

- Soft Skills: Strategic Thinking, Innovative Problem Solving, Effective Communication, Leadership, Agile Project Management, Collaboration and Teamwork
- Languages & Frameworks: Python, JavaScript, Django, React, PyTorch, TensorFlow, Keras, SciKit Learn, Django REST
- AI & Machine Learning: NLP/NLU (GPT-3, LLAMA2, Prompt Engineering), Knowledge Graphs, Ontologies, Data Science, Predictive Modeling
- Tools & Technologies: Neo4j, Termboard, Excel, Git, Agile Methodologies, Rest APIs

EXTRA CURRICULAR ACTIVITIES

ICT4D Conference Volunteer, MERL Tech | Accra, Ghana

March 2024 - March 2024

Largest conference in Africa on ICT for global impact - organised by CRS

- Led a pioneering workshop on no-code chatbot development for 200 NGO professionals, directly contributing to democratisation of AI technology
- Facilitated discussions on use of generative AI and SBC in technology, showcasing leadership in AI application for social impact

Academic Coach Volunteer, StemBees | Cape Coast, Ghana

April 2022 - April 2022

Academic Coach

- Mentored 25 students in Kwaman District in Central Region of Ghana using Coding games to develop interest in Software Engineering and Technology
- Spearheaded coding workshops for underprivileged students, igniting a passion for software engineering in over 100 participants