Suliah Victor Bamomwo

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Research Interests

Deep Learning, Natural Language Processing, Reinforcement Learning

Education

University of Electronic Science and Technology of China (UESTC) 2024 – 2026 (Expected)
Master of Engineering in Software Engineering (GPA: 3.85/4.0)
Scholarship: Chinese Government Scholarship

University for Development Studies, Tamale (UDS), Ghana 2016 – 2020
BSc. Computer Science, First Class Honors (GPA: 4.52/5.00)
Scholarship: MTN Bright Scholarship

Research Experience

Teaching Assistant CKT-University of Technology and Applied Sciences
2020 – 2021
Advisor: Prof. Edward Y. Baagyere

- Assisted in tutoring undergraduate courses: Computer Graphics and Introduction to Python Programming.
- Supported lesson planning, tutoring, and assessment.

Student Researcher University of Electronic Science and Technology of China
2024 – Present
Advisor: Prof. Maolin Yang

- Independent research (thesis) on personalized health monitoring through wearable biosignals
- Collaborated with postdoctoral researchers on laboratory-based research projects.

Professional Experience

Software Developer Afro Technologies, Accra, Ghana
2023 – 2024

- Contributed to the design of backend infrastructure for educational technology products.
- Led prototyping of adaptive learning tools.
- Collaborated on research into AI-based education systems.

Publications

- V. Suliah, "Learning Individual Health Baselines from Wearable Biosignals for Personalized Health Monitoring," *IEEE Journal of Biomedical and Health Informatics*, under review, 2025.

Projects

Prompt-Driven Personalized Learning with Large Language Models *2024*
An intelligent tutoring platform leveraging system prompts and LLMs to deliver personalized, adaptive learning experiences. My contributions include prompt engineering, backend development, and personalization logic.

Learning Individual health Baselines from Wearable Biosignals *2025*
Developing a deep learning framework to model individual health baselines and detect anomalies in physiological signals (e.g., heart rate, EDA). Techniques used include unsupervised learning, PyTorch, and signal processing.

KR-Reasoner: Graph Knowledge Representation for Causal Reasoning *2025*
A modular framework that separates knowledge representation from actual reasoning processes, enabling causal LLMs to plan and self-evaluate in solving complex problems.

Technical Skills

- **Languages:** Python, JavaScript, C++
- **Machine Learning:** PyTorch, TensorFlow, OpenCV, Hugging Face Transformers
- **Tools:** Git, Jupyter Notebook
- **Databases:** SQL, PostgreSQL, MongoDB
- **Software Dev:** Node.js, Flutter

Awards and Leadership

- Chinese Government Scholarship (2024)
- MTN Bright Scholarship (Undergraduate)
- Best Graduating Computer Science Student (2020)
- President, Computer Science Association, UDS
- President, MTN Bright Scholars, UDS

Certification

- Supervised Machine Learning: Regression and Classification — DeepLearning.AI
- MCP: Build Rich-Context AI Apps with Anthropic — DeepLearning.AI
- How Transformer LLMs Work — DeepLearning.AI
- Attention in Transformers: Concepts and Code in PyTorch — DeepLearning.AI
- Introduction to Deep Learning — Kaggle
- Intermediate Machine Learning — Kaggle
- Introduction to Machine Learning — Kaggle

Volunteering

- Coding Tutor: Kofi-Annan ICT Centre of Excellence — 2018-2020
- PyHackaton Organiser: University for Development Studies (UDS) — 2017-2019
- Community Volunteer: Third Trimester Field Practical Program - UDS — 2017-2018