SAMUEL KODI

Accra, Ghana | +233 256 800 729 | samkodi91@gmail.com

skodi001@st.ug.edu.gh | https://www.linkedin.com/in/samuel-kodi-51b310261/

EDUCATION

MSc. Computer Science Oct, 2023 – Sep, 2024
University of Ghana, Legon

BA. Information Studies Aug, 2018 – Oct, 2022
University of Ghana, Legon

TECHNICAL SKILLS

- **Frontend:** React, Vite, Axios
- **Backend:** Node.js, Express, Multer, Mongoose
- **Database:** MongoDB Atlas
- **Deployment:** Vercel, Render, Git, GitHub
- **Networking Tools:** Cisco Packet Tracer, Wireshark, GNS3, pfSense, Nagios
- **Operating Systems:** Windows Server, Active Directory, Linux (Ubuntu, CentOS), macOS
- **Cloud Platforms:** AWS (EC2, S3, IAM, Lambda), Microsoft Azure, Office 365, Exchange
- **Programming:** JavaScript (ES6+), Python, C++, SQL, Java, MATLAB

CORE COMPETENCIES

- IT Support and Troubleshooting
- Network Configuration and Administration
- Cloud and On-Premise Infrastructure Management
- Technical Documentation and User Support
- Problem-Solving and Analytical Thinking

PROJECTS

Driver Dashboard: Full Stack Web Application Aug 2025 – Aug 2025

- Designed and developed a responsive driver registration and dashboard management system.
- Implemented driver profile and truck document uploads with secure storage using Multer and MongoDB.
- Built RESTful APIs with Node.js and Express, integrated with a React frontend using Axios.
- Deployed the frontend on Vercel and backend on Render for public access.
- Repository: https://github.com/Coldsummers/driver-dashboard

- Live Demo: https://driver-dashboard-nine.vercel.app

NS3 Simulations: Wireless Network Performance Analysis Dec 2024 – Feb 2025

- Simulated wireless networks with ns-3 to analyze the effects of node density and traffic load on key performance metrics (Packet Delivery Ratio, End-to-End Delay, and Throughput).
- Conducted traffic load experiments, demonstrating the tradeoff between increased throughput and reduced PDR under high traffic conditions.
- Repository: https://github.com/Coldsummers/wireless-network-performance-ns3-node-density-traffic-load

Energy Efficiency Analysis of BLE Sensors with WuRs Jan 2024 – Oct 2024

- Simulated and analyzed energy consumption for BLE heart rate bioimplant sensors integrated with Wake-Up Radios (WuRs) using MATLAB and Python.
- Compared three configurations (Standalone Duty-Cycled BLE, Always-On WuR, Duty-Cycled WuR) to identify the most energy-efficient design.
- Repository: https://github.com/Coldsummers/BLE-WakeUpRadio-Simulations

WORK EXPERIENCE

Department of Information Studies, University of Ghana Nov, 2022 – Oct, 2023

IT Support and Tutoring Assistant

- Oversaw daily operations of a 30-seat computer lab, maintaining 95%+ system uptime during exams and practical sessions for over 500 students.
- Provided first-line technical support to over 150 students and faculty, resolving hardware, software, and network issues to ensure seamless academic operations.
- Facilitated weekly tutorials totaling 10+ hours for 80+ undergraduate students, covering system analysis, programming fundamentals, and telecommunications concepts.

University of Ghana Computing Systems (UGCS) Dec, 2023 – Sep, 2024

Network Administration Intern

- Maintained Windows Server environments and assisted with user account management via Active Directory.
- Delivered technical support to over 150 faculty and staff, diagnosing and resolving network connectivity issues across multiple departments.
- Assisted in the design, implementation, and management of VLANs and subnets, improving internal traffic flow and network segmentation.
- Supported configuration and troubleshooting of over 20 network devices, including Cisco routers, managed switches, and firewalls, enhancing overall infrastructure reliability.

CERTIFICATIONS & TRAINING

- ISC2 Certified in Cybersecurity (CC)
- Microsoft Azure Fundamentals AZ-900 Certification