

# ALIF OSMAN OTOO

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## SUMMARY

Aspiring tech professional with strong foundation in computer engineering and hands-on experience in Mobile and web Development, UI/UX and Graphic design, IT support, network installation, and surveillance maintenance as well as ML and AI enthusiast. Seeking to leverage technical expertise and problem-solving skills in a dynamic tech environment to drive innovation and efficiency.

## EDUCATION

**Kwame Nkrumah University Of Science And Technology, BSC. Computer Engineering** | Kumasi, Ghana .  
GPA: 67 / 100

Expected  
graduation date :  
Nov 2024

Relevant Courses: Computer Vision and Robotics | Software Engineering| Computer Networking | Database and Information Retrieval| OOP(C++) | Secure Network Systems| Data Structures and Algorithms(C++) | Distributed Computing(AWS )

## RESEARCH EXPERIENCE

**Kwame Nkrumah University Of Science and Technology** (Computer Engineering  
Department, 2024)

Jan 2024 - Aug 2024

### Development and Implementation of IoT Device for Precision Agriculture

- Led a 3-person team to research and develop an IoT device with a machine learning based model for making analysis and predictions to help in crop yield.
- Developed an IoT system for precision agriculture that utilized Machine Learning to analyze and predict farmland conditions, enabling wireless data transmission and real-time decision-making for farmers.
- Integrated sensor data into a user-friendly platform, assisting farmers in regulating fertilizer usage and minimizing reliance on assumptions, thereby enhancing overall agricultural efficiency and productivity.

### Review of Cyber-Physical Systems for Mitigating Dumsor | Secure Network Systems

June 2024 - Aug 2024

- Conducted comprehensive literature review and analysis of existing cyber-physical systems (CPS) implementations in mitigating dumsor, synthesizing findings into actionable insights for future research and policy development.
- Collaborated with domain experts to assess technological feasibility and socio-economic impacts of CPS applications in improving grid reliability and resilience against power outages, contributing to informed decision-making in energy management strategies.

## WORKING EXPERIENCE

**Wilmar Africa Limited IT support National Service Personnel (User support & Networking)** |  
In person (Accra, Ghana)

Oct 2024 - Present

- Assisted in the installation and maintenance of network and surveillance systems p.
- Provided IT support, resolving technical issues and ensuring smooth operations .
- Conducted regular system checks and updates to enhance network security and performance .

**JustGo health Ltd, UIUX Intern** | Remote (Accra, Ghana)

Aug 2023 - Oct 2023

- Conducted user research and usability testing to gather feedback, iteratively refining designs to meet user needs and enhance overall usability and satisfaction .
- Designed intuitive and visually appealing user interfaces for JUSTGO health's digital platforms, ensuring a seamless and engaging user experience across web and mobile applications .

**Ghana Specialty Fats and Industries Ltd, Wilmar IT support Intern (User support & Networking)** | In person (Accra, Ghana)

Oct 2023 - Dec 2023

- Assisted in the installation and maintenance of network and surveillance systems p.
- Provided IT support, resolving technical issues and ensuring smooth operations .
- Conducted regular system checks and updates to enhance network security and performance .

## TEACHING EXPERIENCE

**Trail Support Tutor, Kwame Nkrumah University Of Science and Technology (Computer Engineering Department )**

Sept 2023 - Present

- Providing assistance and guidance to students who are navigating new academic paths, especially those preparing for supplementary exams.

- Provided one-on-one and group tutoring sessions to help peers understand complex concepts, improve academic performance, and develop effective study strategies.
- Created customized learning materials and resources tailored to individual learning styles and needs, fostering a supportive and collaborative educational environment.

**SKILLS**

|                        |  |
|------------------------|--|
| Languages              | C/C++, HTML, CSS, Javascript, SQL, React Native, Python                                |
| Database               | PostgreSQL, Appwrite   |
| Tools and Technologies | Linux, Tensorflow, Adobe Photoshop, Adobe Illustrator, Figma, CorelDraw, Eagle , Visio |
| Typesetting            | Microsoft Word, LATEX  |

**PROJECTS**

**Mobile Banking App | Software Engineer**

Feb 2023 - April 2023

- Created responsive and user-friendly interfaces for banking applications using React.js, ensuring seamless navigation and accessibility across devices.
- Collaborated with UX/UI designers to implement designs and prototypes, focusing on improving user experience and incorporating feedback loops to improve usability metrics.

**Agro\_predict\_app | Expo Project**

Feb 2024 - April 2024

- Developed an agriculture-focused mobile application using React Native.
- Implemented machine learning algorithms to predict crop yield based on environmental data, contributing to sustainable farming practices.

**Arduino-based Environmental Monitoring System |Final Year Project**

Jul 2024 - Sept 2024

- Designed and developed an environmental monitoring system using Arduino Uno, temperature, and soil moisture sensors.
- Simulated and tested the system using Proteus, focusing on accuracy and reliability in real-time data collection.

**PROFESSIONAL TRAINING AND CERTIFICATE**

**AWS Academy Cloud Foundations | Amazon Web Services**

Jan 2024 - Feb 2024

**AWS Academy graduate Data-Engineering | Amazon Web Services**

Feb 2024 - March 2024

**AWS Academy Cloud Developing | Amazon Web Services**

Feb 2024 - April 2024

**AWS Academy Cloud Semester two | Amazon Web Services**

March 2024 - April 2024

**Networking Devices and Initial Configuration |Cisco Networking**

Jan 2024 - Feb 2024

**Network Technician Career Path | Cisco Networking**

Feb 2024 - March 2024

**Network-Support-and-Security | Cisco Networking,**

Feb 2024 - March 2024

**Networking-basics |Cisco Networking**

March 2024 - April 2024

**VOLUNTARY/EXTRA-CURRICULAR ACTIVITY**

**Founder, (KL-Techub) | Graphic Design, Mobile and Web development, UI/UX**

Sept 2023 - Present

- Established and led KL Techub, a technology solutions firm specializing in web and mobile development, UI/UX design, and graphic design, driving business growth and client satisfaction through innovative and high-quality services .
- Oversaw a diverse team of developers and designers, managing projects from concept to completion, ensuring timely delivery, and maintaining excellence in all aspects of design and development .