Suleiman Sabo Muhammad

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EDUCATION

Newcastle University — **September. 2023 - August. 2024**
*MSc Cyber Security -***Grade:Distinction*** — *Newcastle, United Kingdom*

Newcastle University — **September. 2020 - June. 2023**
*BSc Computer Science (Software Engineering)-***Grade:(1st Class Honours)*** — *Newcastle, United Kingdom*
Supervisor: **Professor Abi Durrant**

INTO Newcastle University — **January. 2020 - September. 2020**
International Foundation - **Grade: 84%** — *Newcastle, United Kingdom*
Science, Computing, Engineering and Mathematics

RESEARCH EXPERIENCE

Newcastle University — **September. 2023 - August. 2024**
Master's Dissertation — *Newcastle, United Kingdom*

Evaluating and Comparing the Effectiveness and Trade-Offs of Component Level versus System-Level Risk Assessment Approaches within a Cyber Physical System: A Case Study of the SWaT Testbed

- Analyzed component-level and system-level risk assessment techniques within the SWaT testbed, employing Data Flow Diagrams (DFDs), STRIDE threat modeling, and Attack Tree Analysis (ATA).
- Identified vulnerabilities such as weak authentication mechanisms and insufficient data integrity checks, recommending mitigations including multi-factor authentication and encryption.
- Highlighted systemic risks like interconnected threats and cascading failures, advocating for measures such as network segmentation and advanced intrusion detection systems.
- Demonstrated the effectiveness of integrating both component-level and system-level approaches to provide a balanced and comprehensive cybersecurity strategy for industrial control systems.
- Contributed to the strategic deployment of security measures in cyber-physical systems, ensuring robust protection against diverse cyber threats.
- Achieved an overall grade of 80% for the research and its findings.

Newcastle University — **September. 2020 - June. 2023**
Bachelor's Dissertation — *Newcastle, United Kingdom*

Exploring the Use of Digital Signatures to Address the Issues of Corruption, Usability, and Accessibility In Nigeria

- Conducted a comprehensive study involving participants, utilizing surveys and interviews to gather data on user experiences, and interaction with software systems, followed by thorough data analysis.
- Completed an in-depth 15,000-word research project for a dissertation titled 'Exploring the Use of Digital Signatures to Address the Issues of Corruption, Usability, and Accessibility In Nigeria' achieving a grade of 75%.

ONLINE CERTIFICATE

ISC2 — **October. 2024**
CC Domain 1: Security Principles

ISC2 — **October. 2024**
CC Domain 2: Incident Response, Business Continuity, and Disaster Recovery Concepts

London School of Business and Finance — **September. 2023**
Certificate in Policy Issues in the Global Economy — *London, United Kingdom*

Government College — **September. 2023**
Certificate in Python Programming for Data Science — *Rajahmundry, India*

AWARDS & ACCOLADES

- **2024 The Sage and School Prize**: Awarded the Sage and School prize for best overall performance by a MSc Cyber Security student in the School of Computing

- **2023 Petroleum Technology Development Fund**: Total costs for a master's degree at Newcastle University, covering visa application fees, tuition, living expenses, and travel allowances.

- **Top Academic Performance:** Achieved the overall highest mark in the 'Principles of Computing' module with a grade of 95%.

MINI PROJECT

Secure Chat System March. 2024
- Facilitated the development of a secure chat system as part of an 8-member team.
- Conducted comprehensive threat modeling and created a security policy to identify and understand potential adversaries.
- Implemented React for the frontend and incorporated Firebase for the backend to ensure real-time communication.
- Enhanced the project's security by applying steganography techniques for message embedding, coupled with advanced encryption methods, to ensure the confidentiality and integrity of communications.
- Achieved a 100% grade on the group technical report and a 90.4% overall grade for the comprehensive project.

Predictive Analysis Of Weather Trends December. 2023
- Conducted an analysis of weather data collected over 12 months using a Raspberry Pi computer, aiming to predict weather conditions at intervals ranging from 5 minutes to 12 hours.
- Explored forecasting models, including Long Short-Term Memory (LSTM), Autoregressive Integrated Moving Average (ARIMA), and Moving Average, based on strengths and suitability for time series data.
- Derived an optimised model architecture for the LSTM neural network, achieving remarkable predictive accuracy with an R-squared score of 0.9675.

Rubbish App January. 2022
- Contributed to a team that developed a cleaning app aligned with the United Nations' Sustainable Development Goals.
- Aimed to alleviate government strain by involving communities and individuals.
- Enabled tracking of areas needing cleaning and facilitated user reporting to foster environmental awareness.

Lottery Web Application November. 2021
- Developed a Lottery Web Application designed to streamline and enhance player participation.
- Enabled two participation modes: member selection and random number generation.
- Integrated advanced administrative controls into the system for overseeing winning draws, enabling secure and efficient management of lottery operations.

Blogging Web Application October. 2021
- Designed and implemented a web application specifically for blogging.
- Implemented a user management system featuring distinct user roles, specifically designed for users and administrators.
- Granted comprehensive control over blog management, empowering admins with capabilities to curate content, which includes the creation, updating, and deletion of content.
- Ensured robust content governance through the implementation of comprehensive administrative controls.

OTHER WORK EXPERIENCE

Matchday Assistant August. 2021 - Present
Newcastle United Football Club *Newcastle, United Kingdom*
- Ensured fan safety and comfort, managing crowds and rapidly responding to incidents.
- Developed skills in clear communication and collaborative problem-solving in a fast-paced environment.

Assistant Manager January. 2019 - Present
Kuyan Integrated Farm *Kano, Nigeria*
- Played a pivotal role in managing the financial aspects of the farm operations. Demonstrated adeptness in inventory management by overseeing the stock rotation process, ensuring optimal stock levels.

HOBBIES

Watching and playing football, playing FIFA, talks about computer security, coding, travelling and listening to afrobeat music.