ABUBAKAR SADIQ SHITTU

Newcastle Upon Tyne, United Kingdom

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RESEARCH INTERESTS

Usable Security and Privacy

EDUCATION

Newcastle University **Sept. 2023 - Present**
M.Sc. Advanced Computer Science - ***Semseter 1 Grade: 79.35 %*** 🔗 *Newcastle, United Kingdom.*
Supervisor: **Professor Thomas Gross**

Fountain University Osogbo **March 2018 - Apr. 2021**
B.Sc. in Computer Science - ***Grade****: **First Class Honours*** *Osogbo, Nigeria.*
Supervisor: **Mr. Lawal Mohammed**

Federal Polytechnic Bida **Nov. 2015 - Sept. 2017**
National Diploma (associate degree) in Computer Science *Bida, Nigeria.*

RESEARCH EXPERIENCE & PROJECTS

Secure Chat System **March 2024**
MSc Module: Research and Group Project in Security and Resilence *Newcastle, United Kingdom.*

- Participated in an 8-member team project focused on developing a secure chat system that allow text and file exchange.
- Engaged in threat modelling and security policy development to identify potential adversaries, and define their capabilities and motivations to ensure the chat system's security .
- Implemented a chat system leveraging the Spring Boot and Spring Security frameworks in Java, employing WebSocket for encrypted message exchanges between clients and servers.

Predictive Analysis Of Weather Trends **December 2023**
MSc Module: Machine Learning *Newcastle, United Kingdom.*

- 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 various forecasting models, including Long Short-Term Memory (LSTM), Autoregressive Integrated Moving Average (ARIMA), and Moving Average, based on their strengths and suitability for time series data.
- Derived an optimised model architecture for the LSTM neural network, achieving an R-squared score of 0.9827.

Real-time Face Detection and Recognition **June. 2020 - Nov. 2020**
BSc Project, Fountain University Osogbo *Osogbo, Nigeria.*

- Conducted a review on face detection and recognition systems, examining strengths, weaknesses, and application areas.
- Presented the progress and outcomes of the project to audiences ranging from 10 to 40 individuals, including lecturers and peers.

TEACHING EXPERIENCE

10 Academy **Aug 2022 - Jan. 2023**
Careers Tutor (Supervisor: **Arun Sharma**) *Addis Ababa, Ethiopia.*

- Designed and led 3-hours per week career development lectures for 30 web3, data science, and machine learning trainees, demonstrating skills in curriculum planning, content delivery, and audience engagement.
- Graded and provided detailed feedback on career exercises to over 35 trainees, enhancing preparation for job search phase post-training completion.
- Delivered holistic job search support to alumni, encompassing tailored reviews of resumes and cover letters, and personalized interview coaching, which enhanced their candidacy.

PUBLICATIONS

[1] Shittu, A. S., and Abdulsalami, B. (2023). *Software Defect Prediction Using Machine Learning Approach: A Contemporary Review. TechRxiv Preprint. https://doi.org/10.36227/techrxiv.23648907.v1.* ⬈

AWARDS & ACCOLADES

- **F**unding to attend the Summer School on real-world crypto and privacy 2024.

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

- **2023 Commonwealth Shared Scholarship**: Full funding for a Master of Science in Financial Technology at the University of Stirling. (***Award declined in favor of Chevening Scholarship.***)

- **100% Scholarship (valued at $12,000)**: Funding for Master of Science in Computer Engineering at Kadir Has University, Istanbul, Turkey. - 2022 (***Award declined***)

- **AIT Partial Scholarship (Approximately $14,000)**, towards a master's in Data Science & Artificial Intelligence at the Asian Institute of Technology, Thailand. - 2022 (***Award declined***)

- **2019 Most Outstanding Student Award**, College of Natural and Applied Science, Fountain University Osogbo.

OTHER WORK EXPERIENCE

Student Ambassador   **Oct. 2023 - Present**
Newcastle University.   *Newcastle, United Kingdom*

- Involved in university events and marketing initiatives, including leading Open Days, guiding campus tours, and participating in focus groups aimed at enhancing the student experience.

Administrative Assistant   **Oct. 2021 - Oct. 2022**
Directorate of Admissions, Examination and Records, Kaduna State University.   *Kaduna, Nigeria*

- Inspected undergraduate examination procedures, ensuring adherence to academic standards and upholding the integrity of the assessment environment.
- Coordinated student complaints and appeals for admissions and exams.
- Catalogued important documents and guided new students through the registration process.

Information Technology Helpdesk Intern   **March 2019 - Aug. 2019**
Nigerian National Petroleum Corporation.   *Abuja, Nigeria*

- Served as the primary technical support contact for a network of over 100 computer users, resolving an average of 5 queries per day.
- Explained technical details in understandable terms for all support interactions.
- Achieved a high satisfaction rate through diligent follow-ups, ensuring resolution of user issues.

PROFESSIONAL MEMBERSHIPS

- Black in AI, **Member**

- Society for Multidisciplinary and Advanced Research Techniques in Africa, **Member**

SKILLS AND HOBBIES

Operating System: Linux, Windows
Static Analysis Tools: SonarQube
Hobbies: Watching and playing football, playing FIFA, talks about computer security and listening to afrobeat music.