Olamotse Roland Igbape

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EDUCATION

Georgia Institute of Technology

Atlanta, USA.

M.S. in Computer Science, spec. Interactive Computing

May 2026

Key Courses: Software Development Process, Software Architecture and Design, Information security, Network Security, AI, ML, NLP, AI Ethics, Data and Visual Analytics, and Ed Tech

Edo State University-Uzairue

Uzairue, Edo State, Nigeria October 2023

B.S. in Computer Science

WORK EXPERIENCE

Federal Polytechnic Auchi

Edo State,

NG

Network Services Engineer | Technical Services Unit, Management Information Systems Directorate 2017 - August 2024

January

- Spearheaded technical planning for 2 major institutional IT projects (NITDA and ODFEL ICT lab) with \$200k+ ICT procurement initiatives, evaluating vendor solutions against security, scalability, and cost criteria, ensuring 100% alignment with MIS Directorate strategic goals resulting in 7% cost savings and avoiding all deployment failures with thorough pre-deployment testing.
- Provided comprehensive network administration and technical support for a campus infrastructure serving 5,000+ users and managing 300+ network devices (routers, switches, firewalls, APs).
- Achieved & maintained an average network uptime of 99.7% during on-duty time through proactive monitoring, maintenance, and timely issue resolution.
- Key contributor to major network infrastructure upgrade, including (expanding campus Wi-Fi coverage by 30% to 5 new zones, benefiting 1,000+ users, and assisting in the migration to a new ISP link).
- Supervisor: Dr. Evelyn Oduntan, Director, MIS

TEACHING AND VOLUNTEER EXPERIENCE

Federal Polytechnic Auchi

Edo State, NG

Teaching Assistant | Department of Computer Science,

Dec. 2023 - Aug 2024

- Assisted Dr Moses Igbape (Chief Lecturer/Professor) for the MIS course, supervising student projects and providing research support
- Supervisor: Dr. Moses Emandomi Igbape

Ingenious Minds School, Jattu

Edo State, NG

Volunteer Teaching, Coding Workshop, and Sports Coordinator

Aug 2019 – Mar 2020

- Taught Mathematics to 50+ primary students, achieving an average 15-20% improvement in student assessment scores.
- Launched and led introductory coding workshops for 10+ students
- Coordinated all logistics for annual primary school sports events with 100+ active participants.
- Supervisor: Dr. Esosa Enoyoze (Proprietor, IMS)

Part-time Instructor | Department of Computer Science, School of Evening Studies

Jan 2017 – Sep 2018

- Facilitated training for the "Computer Application Packages" course and lab practicals for National Diploma and "Data Communications & Networks" course for Higher National Diploma programmes respectively, engaging over 400 students.
- Supervised 16 National Diploma Finals students, achieving a 100% on-time completion rate and contributing to a 100% final project pass rate for supervised students.
- Supervisor: Mr Victor Obuda, Program Coordinator Department of Computer Science, School of Evening Studies.

PUBLICATION

- A Bayesian Learning Framework Powered by IoT for Enhancing Highway Safety and Reducing Accidents: A Case Study of Benin-Onitsha Express Way | J. E. Jibunor, B. B. Odigie, O. R. Igbape | Published in: International Journal of Research in Information and Applied Sciences (IJRIAS), November 15, 2024 | DOI: 10.51584/IJRIAS.2024.910032
- Takagi-Sugeno Integrated Fuzzy System in Subsurface Identification | I. Odesanya, K. E. Ukhurebor, I. U. Siloko,
 P. B. Olorunfemi, O. R. Igbape | Published in: Covenant Journal of Physical and Life Sciences, vol. 9, no. 2, 2021 |
 Retrieved from https://journals.covenantuniversity.edu.ng/index.php/cjpls/article/view/2870

PROJECTS

zk-creds-demo

• Demonstrated a flexible anonymous credential system using zkSNARKs (Groth16, Poseidon hash) and the zkcreds-rs library for privacy-preserving verification of attributes such as age on passport data.

Applied Cybersecurity - Vulnerability Analysis & Exploit Demonstrations

Hands-on analysis and implementation of common attacks in controlled environments, covering compilation
process, buffer overflows, format string attacks, SetUID, environment variable exploits, secure random number
generation, secret/public-key encryption (RSA, PKI), padding oracle attacks, and hash length extension attacks

Advanced Data Engineering & Visualization Projects

• Modeling urbanization's impact on coastal ecosystems (XGBoost, SHAP, D3.js dashboard) and advanced data engineering projects covering TMDB API, SQLite, Flask, Tableau, D3.js (graphs, interactivity, maps), Azure ML, Spark/Scala on DataBricks, PageRank, Random Forest from scratch, Scikit-Learn, and LLM API integration.

SKILLS

Programming (C, Java, Rust, Python): Systems Programming, Exploit Analysis, zkcreds/zksnarks Anon. Cred. Implementation.

Applied Cryptography: Merkle Trees, Poseidon Hash, MD5/SHA Alg.

Cloud and data technologies: AWS-Reinforcement Learning with DeepRacer, GCP-Cloud Architecture, Apache Spark-Large-Scale Data Processing, Databricks-Collaborative Data Analytics, Tableau & d3-Interactive Dashboards, OpenRefine-Data Cleaning/Wrangling

Analytical and soft skills: Research Methodology, Communication, Collaborative teamwork Language skills: English (Native Speaker), Hausa(Fluent), French(Intermediate), Mandarin(Basic)

PROFESSIONAL DEVELOPMENT (Seminar/Webinar/Workshop/Certificates)

Honours and Awards:

Google Africa Development Scholarship (GADS) Recipient - Cloud Developer path, 2021

Workshops:

Google Africa Developer Scholarship - Google Cloud workshop "Deploying Google Kubernetes Engine", November 6th 2021

United States Institute of Peace "Design, Monitoring and Evaluation for Programming in Fragile Environments", April 2020

United Nations Office for Disarmament Affairs "CyberDiplomacy", April 2020

Certifications:

IBM Cybersecurity Analyst Professional Certificate, 2022

Google Project Management Certificate, 2022

Google IT Support Professional Certificate, 2020

PROFESSIONAL AFFILIATION

Member, International Association of Engineers (IAENG), 2022-Present

Member, Data Scientist Networks (DSN), 2022-Present

Member, Black in AI, 2022-Present

REFERENCE