

Education

2017–2019

MSc. Social Informatics, *Kyoto University*, Japan.

2009–2014

B.Eng. Electronic Engineering, *University of Nigeria, Nsukka*, 4.68/5.00

Thesis: *Design of University Portal with Biometric Lecture Attendance System* (with distinction)

Selected Coursework: Software Engineering, Algorithms, Data Structures, Systems Engineering, Computer Architecture, Microprocessor Systems and Design, Communication Networks, Programming Languages, Calculus, Linear Algebra, Computational Methods, Statistics.

Experience

Jan. 2017 -

Lead software engineer, [EducateLagos Project](#) (Contract)

- Developed a Learning Management System leveraging on [Open edX](#).
- Implemented SSO based on Jasig's Central Authentication Service (CAS).
- Integrated payment services for online purchase with cash cards.
- Setup and manage current running instances on AWS.

Mar. 2017 – Apr. 2017

Lead software engineer, [Trybe Lifestyle](#) (Contract)

- Ecommerce platform for sale of footwears

Feb. 2017

Software engineer, [United Bank of Africa](#) (Contract)

- Implemented service for scheduled reporting of customer information to regulatory endpoints.
- Designed model for a platform for tracking and resolving customer requests for lien processing.

Sep. 2016 - Nov. 2016

Lead software engineer, [Enugu Electricity Distribution Company](#)

- Led a team of 5 in the development of a [Commercial energy bills Data Analysis Platform](#) leveraging on the robust data analysis interface provided by MongoDB. Achieved 100% increase in bills payment by providing insights on aging analysis of debts and targeted collections.
- Developed models for implementation of mobile and web apps for cash collection by energy marketers to reduce inefficiency with increased accountability and availability (offline enabled).

Nov. 2014- Aug. 2016

Software engineer, [Gidi Mobile Limited](#) (Africa's first mobile learning platform), Lagos.

- Wrote algorithms for scheduling remote data sync and image compression for better performance on poor network connections.
- Reengineered friends' module to provide users with new and improved real-time messaging functionalities.
- Designed the database for friends' module and other app data with proper versioning for good offline experience.
- Built the *Subject Mastery Evaluation Engine*, profile personalization module and re-engineered the friends' module to enable message sync across different platforms. with [Layer](#) (WebSockets based implementation), [AngularJS](#), J2EE and [JBoss Fuse](#).
- Co-designed the database model for Gidimo Community feature on android and web; a discussion forum for learners to share ideas and collaboratively solve problems.

July 2014 - August 2014

Research Assistant, *National Center for Energy Research and Development, UNN.*

- Led a team in developing a multipurpose data logging system with [Processing](#), [Arduino](#), MicroSD shield and sensors. This system automated recurrent capturing of temperature, humidity, current and voltage for researchers at University of Nigeria Nsukka National Center for Energy Research and Development.

Apr. 2013 – Sep. 2013

Software developer intern, [Seamfix Nigeria Limited](#), Lagos.

- Furnished [Display Tag API](#) with AJAX loading of data in response to search queries; improving user experience. Wrote the server-side logic for searching database using [Hibernate Criteria](#).
- Compiled a software developer guide for future interns with sample projects on the various technologies used at Seamfix to enhance the internship experience.

Technical Experience

Languages

Java, C++, C, JavaScript, Processing, MATLAB, Octave.

Technologies

Platforms: Android, Java EE, Node.js, Firebase, Google AppEngine. **UI/Frontend Frameworks.** JQuery, Bootstrap, AngularJS (1.x and 2.0), Handlebars. **Databases:** MySQL, PostgreSQL, SQLite, Realm Java, MongoDB. **Web Servers:** JBoss Fuse, Glassfish, Wildfly, Tomcat. **Cloud Hosting Services:** AWS, Google Compute Engine, Heroku. **Embedded Systems:** Intel MCS-51 and PIC16F877A controllers, Arduino, ZigBee XBee. **Version Control Systems:** Git (GitHub and Bitbucket), Apache Subversion (TortoiseSVN). **Open Source:** Open edX, Moodle, Jasig's CAS

Personal Projects

[ClassRepPlus](#)

Developed the backend and database for a web based app for academic collaboration between students and lecturers of tertiary institutions in Sub-Saharan Africa. Built on Google's AppEngine platform with Java EE, Datastore (Objectify) and Google's Plus, Drive, Maps, Calendar, and Gmail APIs.

[TrueVote](#)

A government transparency initiative to simulate the 2015 Nigerian general elections and compare with actual results to suggest fairness or irregularities. Developed REST API for accessing and updating election data. Developing the web interface and co-developing the android application.

Papers & Presentations

Design of a Coordinates Aware Remote Module for Effective Oil and Gas Pipeline Monitoring Using GPRS, GPS and Google Maps on Android Devices. Society of Petroleum Engineers OnePetro Journal. 05/2015. doi:10.2118/178391-MS

Design of a University Portal with Biometric Lecture Attendance Monitoring System, Scholars Journal of Engineering and Technology 04/2014; 2(6B):847-856.

Design of a Fingerprint Reader Enabled Remote Monitoring Module with Interface to Web Applications, International Journal of Scientific and Engineering Research 02/2015; 6(2):704

Awards

2017 Japan Ministry of Education, Culture, Sports, Science and Technology Scholarship to conduct a research and masters degree in Kyoto University.

2014 Best graduating student (highest GPA of graduating class in Electronic Engineering department).

2013 Google Cloud Developer Challenge finalist (entry ClassRepPlus ranked top 10).

2013 Etisalat Merit Award for Excellence (best in class 1st – 3rd year).