ELIAS IGBALAJOBI

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Education

Ile-Ife, Osun state Obafemi Awolowo University Sept 2014 - Nov 2019

Major: B.sc Computer science with Mathematics

Employment

Android Engineer Plume Design, Inc April 2020 - Current

Plume Wi-Fi (www.plume.com): Smart home and IoT service.

- Redesigned smart Bluetooth and Wi-Fi service API which improved successful POD pairing by 19%.
- Optimized local data storage system, to include caching and compression, which increased file access speed by 35% and improved app speed significantly.
- Refracted legacy code to clean code, migrated to Hilt from Dagger2 and introduced Ktlint to improve code formatting.
- Implement and refactored existing UI animations which improved UI rendering speed significantly and drive better user experience.
- <u>Leveraged knowledge</u> in Kotlin, Java, Clean Architecture, Coroutines, Dagger2, Hilt, RxJava, REST, Unit Testing, OpenSync, Memory Analyser, Git, Jira, Retrofit.

Android Engineer Opera Pay April 2019 - July 2020

Opera Pay (<u>www.operapay.com</u>): Banking and Financial Services.

- Implement Websocket API which facilitates realtime data exchange with server and in-app chat system between customer and support staff.
- Established a realtime remote application feature configuration and update system by integrating the Firebase remote config.
- Increased crash-free users to 98% by identifying and fixing new and existing bugs, and adding unit tests to all existing domain, data and UI Driven source code.
- Improved code structure, maintainability, and testability by spurring clean code which further improves feature development speed and bug fixing significantly.
- <u>Leveraged knowledge</u> in Kotlin, Clean Architecture, GraphQL, Retrofit, Dagger2, Unit Testing, Git, Jira.

Android/iOS Engineer Vela Solution June 2017 - April 2019

Vela (vela.com.ng): Banking and Financial Services.

- Developed an offline mobile banking Android and iOS application using unstructured supplementary service data (USSD) GSM and SMS protocol for data exchange with the internet server.
- Improved message and payment security by implementing end-to-end message encryption system using RSA cryptosystem.
- Reduced USSD data exchange size by 34%, by designing a proprietary message compression system which by implication reduced service cost by 8%.
- <u>Leveraged knowledge</u> in Kotlin, Java, Swift, Alamofire, Retrofit, Dagger2, Unit Testing, Git, Jira.

Software Project

Dodul (http://dodul.io): macOS Touch bar customization App

- Developed a macOS software using Swift and Objective-C that allows users to add their favourite applications and website shortcut to their MacBook Touch Bar.
- Incorporated persistence data storage to archive website bookmark and application icon, text and URL.
- Added support for website favicon by creating a favicon generator library for macOS while leveraging Gnome libxml2 for HTML parsing.
- Designed a RESTful backend server using Java Spring Framework to enable website bookmark suggestion and app update service.
- <u>Utilized:</u> macOS, Cocoa, Swift, SwiftUI, Notification Service, HotKey, TouchBar API, Unit Testing, LRUCache, Java Spring Boot, HTML/CSS. Amazon S3 and Route 53.

Storyart (Playstore link): Video creator and Image editing app for Android

• Created and added support for several photo filters and effect using OpenGL vector graphics rendering library.

- Implement support for audio slicing, video montage, and lossless video rendering using FFMpeg's libavcodec and libavformat
- Implement support for onscreen graphic object scaling, dragging, skewing, tracing and special effects.
- Designed and implemented a custom Emoji keyboard to support custom and localized glyphs. Incorporated LRUCache for recently accessed glyphs.
- Designed a RESTful backend server using Java Spring Framework and Amazon S3 to manage and store custom emojis and memes
- <u>Utilized:</u> Android API, OkHTTP, FFMpeg, OpenGL, OpenCV, Java, Kotlin, Unit Testing, Caching, Memory Analyser, Java Graphics, Amazon EC2 and S3, Java Spring, HTML/CSS for the landing page.

Copula (Playstore link): Pair-to-pair Video streaming app for Android

- Developed an Android application to enable users to stream songs, videos and view pictures of nearby friends from their own device without the use of the internet.
- Implement a video and audio file streaming using HTTP Progressive streaming technology.
- Designed an IP Scanner, to scan all active Copula nodes within a user local network so as to enable pairing and data sharing.
- <u>Utilized:</u> Android API, OkHTTP, WebSocket, HTTP Progressive Streaming, FFMpeg, Networking, Unit Testing, Caching, Memory Analyser, Java Spring, HTML/CSS for the landing page.

Amas: State Election monitoring and reporting application for Android

- Developed an Android application for monitoring and reporting Osun state 2019 Governorship election.
- Integrated Amazon Amplify to enable efficient and direct video upload to Amazon S3 cloud storage system.
- Designed an Admin Webpage and RESTful backend server using Java Spring Framework to enable information upload and processing.
- <u>Utilized:</u> Android API, Kotlin, Retrofit, REST, Dagger2, Media Player, Java Spring, HTML/CSS for the landing page.

Skills

Android, iOS, macOS, Web API, AWS, Kotlin, Swift, Java, C, Javascript, MySQL, Cassandra, Redis, SQLite, Clean Code, Unit Testing, Linux, Agile, Jira, OOP.