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Location: Rockville, Maryland

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Education

University of Texas-Pan American

Bachelor in Computer Science, Computer Science (BSCS)

Edinburg, Texas

Experience

DrFirst.com, Inc.

Android Developer

Nov/2014 - Present

- Development of the android client for Akario Backline, a HIPAA Compliant messaging app for healthcare providers.

Rockville, Maryland

**Department of Electrical Engineering at
The University of Texas – Pan American**

Research Assistant

Jan/2014 - May/2014

Edinburg, Texas

- Research and develop an android companion application for a mobile electrocardiogram.

Android Application Developed

DrFirst

- **Akario Backline:** is a secure text messaging platform for Healthcare providers, which allows users to connect and share information quickly, reliably and compliant to HIPAA and HITECH regulations. This application is intended to improve team collaboration and productivity.
 - Features: Animation Transition, Integrated with Firebase Cloud Messaging/Crash Reporting/Analytics, Coroutines, Broadcast Manager, Local Broadcast Manager, Glide Image Processing Library, OkHttp (HTTP client), SQLite Database, Android Jetpack (Room, Compose, Navigation, CameraX, Hilt Dependency Injection, Webkit, LiveData, ViewModel, WorkManager, DataBinding), ExoPlayer(Media Player), Fragments, RecyclerView, CardViews, Bottom Sheets, FAB (Floating Action Button), Navigation Drawer Menu, ViewPager, Constraint Layout, ButterKnife, Support for Vectors, Text Input Layout, Snackbar, Toolbar, Robolectric (Unit Test), Mockito (Unit Test), MockK (Unit Test), Espresso (Instrumental Testing), Flow (Kotlin Reactive Framework), Twilio Video (Video Calls), Material Design, Dark Mode (Dark Theme), backwards compatible all the way to Lollipop (API 21)

Department of Electrical Engineering at UTPA

- **Mobile Electrocardiogram:** This is not your standard Heart Rate Monitor app this mobile app and accessory are design to accurately measure Cardiomyopathy ("heart muscle disease") on the go in a more comfortable way with emergency precautions. The app contain the following features: data storage, location, gyroscope/pedometer and Bluetooth 4.0 LE communication.
 - Features: Bluetooth 4.0 LE (Low Energy), AsyncTask, Gyroscope Sensors, Custom Layout Adapter, SQLite Database, Graphs (AndroidPlot) and only compatible with Kit-Kat (API 19)

Personal Projects

- **Pocket Advisor:** is a mobile app that allows students to register new classes, check their schedule of the semester and also allows them to make an appointment with their faculty adviser.
 - Features: Custom Layout Adapter, AsyncTask, SQLite Database, Fragments, backwards compatible all the way to Gingerbread (API 10)
- **Mobile OCR (Optical Character Recognition):** by implementing Vuforia library this application allows the user to recognize words/sentences and in the same time be able to choose to what language to be translated, once

translation is done the translated words are placed on top of the original words using OpenGL ES to create 3D squares with the character texture of the word translated.

- o Features: Custom Layout Adapter, AsyncTask, Vuforia SDK, JNI, Android NDK, OpenGL ES 2.0, Google Translate API v2, backwards compatible all the way to Gingerbread (API 10)

Leadership

- **Association for Computing Machinery Student Chapter at UTPA** *President* July/2012 - July/2013

Achievements

- **First Place** Engineering and Computer Science Competition (Undergraduate) HESTEC 2013.
- **Most Improved Organization** by Engineering Student Advisory (2012-2013).
- **Third Place** in Windows 8 Hackathon at University of Texas at Austin 2012.

Skills

- **Knowledge of Android platform with 8-years implementing the following features:** Fragments, WebViews, Familiar with JNI, Android SDK and Android NDK, OpenGL ES 2.0, OkHttp (HTTP client), SQLite, Data Storage, Google Play Services Location, Broadcast Manager, Local Broadcast Manager, Snackbar, Permissions, Glide Image Processing Library, Material Design, Support Libraries (AppCompat, Design, CardViews, ExifInterface, Vector, Constraint Layout, Support-v4 and Support-v7), Annotations, Gyroscope Sensors, Bluetooth 4.0 LE (Low Energy), Activity Lifecycle, Google Maps API, Firebase Cloud Messaging/Crash Reporting/Analytics, Dagger 2, Animations(Activity Transitions, Shared Element, Circular Reveal, Page Transformer), SQLite Database, Retrofit, AsyncTask, Dark Mode (Dark Theme), Android Jetpack (Room, Compose, Navigation, CameraX, Hilt Dependency Injection, Webkit, LiveData, ViewModel, WorkManager, DataBinding), ExoPlayer(Media Player), Navigation Drawer Menu, ViewPager, Robolectric (Unit Test), Mockito (Unit Test), MockK (Unit Test), Espresso (Instrumental Testing), Flow (Kotlin Reactive Framework), Support for Vectors.
- **Programming Languages and Frameworks:** Java, C++, C#, C, PHP, MySQL, SQLite, Python, HTML/CSS, JavaScript, PHP, Kotlin, Groovy, Ruby, Ruby on Rails, Mongo DB.
- **Mobile Graphics Engines:** Unity3D (Video Game Engine) and Vuforia (Augmented Reality Engine)
- **Concepts:** OOP, MVC, MVVM and TDD.
- **Languages:** English and Spanish.