Nour Siwar

714-989-0604 | nour.siwar@outlook.com | https://linkedin.com/in/nour-siwar | https://github.com/NourdotSiwar

EDUCATION

University of California, Irvine

Bachelor of Science in Computer Science, GPA: 3.7

Santiago Canyon College

Associate of Science in Computer Science, GPA: 4.0

Graduation: June 2023

Graduation: March 2026

EXPERIENCE

Android Product Engineer Intern

June 2024 – September 2024

ESRI (Environmental Systems Research Institute, Inc.)

Redlands, CA

- Refactoring ArcGIS Maps SDK Sample Viewer's codebase to Jetpack Compose and Kotlin, utilizing concepts of SharedViewModel, Kotlin Flows, Preferences DataStore, and using 3rd party libraries such as Coil, CodeView, and Android Markdown, improving app's maintainability and responsiveness
- Migrate ArcGIS Maps SDK projects to Kotlin and Jetpack Compose, following the MVVM architecture, enabling 200,000 users to learn more about the SDK. Sample tutorial projects include:
 - * From Java and XML, such as Find Closest Facility from Point
 - * From Kotlin and XML, such as Generate Offline Map

Android Developer - Undergraduate Research

July 2023 - Present

University of California, Irvine Health

Irvine, CA

- Engineer and road map server-app integration for a Convolutional Neural Network-based app in a team of 5 using **Kotlin**, and **CameraX** to aid Glaucoma patients in accurately identifying eyedrop medication
- Optimize user interactions by restructuring the scanning functionality, making it more user-friendly and allowing older patients to view their doctor's prescription using XML and Android concepts of Fragments and Activities
- Integrate QR code reading functionality using code-scanner library, simplifying the process for patients to conveniently access their doctor's prescriptions without the need for manual code entry
- Set up a database using Room to store QR code information, allowing for local storage and offline content access
- Expand feature functionality to retrieve data from the database using **SQL** to display QR code information on the fragment, as well as using expandable RecyclerView to show doctor instructions efficiently
- Facilitate converting the project's UI from XML to Jetpack Compose and implementing the MVVM architecture to enhance maintainability and separation of concerns

Android Software Engineer Intern

Jan 2024 – Apr 2024

SiriusXM

Remote

- Researched and crafted a comprehensive tech design document for three project components, including WorkManager and batch processing techniques to streamline execution and enhance decision-making processes
- Verified and validated mapping data behavior between SiriusXM and Google Engage SDK using Charles Proxy to analyze API data transmission, mock snapshot data with JSON, and unit testing to ensure feature functionality
- Implemented a **Broadcast Receiver**, enabling real-time data updates from Google Engage SDK, addressing data staleness concerns, and showcasing SiriusXM content in a dedicated channel outside of the app
- Showcased project to an audience of 50, including Android teams, executives, and leaders, emphasizing the feature's potential to provide immersive experiences in personalized content discovery, driving company growth

PROJECTS

Chordinate | Kotlin, Jetpack Compose, Spotify SDK, ArcGIS Maps SDK for Kotlin, ArcGIS Online

DevPost

- Prototyped a collaborative project with a team of 5, leveraging Spotify SDK, ArcGIS Products, and Android Development tools to enhance user engagement by showcasing local listening trends to Spotify's 626 million users
- Aggregated Spotify data, including album, artist, and track information, in real-time using a BroadcastReceiver
- Implemented Spotify authentication through the Spotify auth-lib and secured the retrieval of currently playing tracks using Shared Preferences, facilitating initial testing and project integration
- Merged usage of ArcGIS Maps SDK for Kotlin and ArcGIS Online to display Spotify's real-time data on the map and show users what others around them are listening to

TECHNICAL SKILLS

Languages: Kotlin, Jetpack Compose, XML, SQL, Python, C++, Java

Tools: Android SDK, Charles Proxy, PostgreSQL, Git, Github, JUnit testing, Firebase