Michael Yu

☎ (949) 923-5609 | ✉ michaelyu678@ucla.edu | ⌨ michael1yu | in michaelyu678

Education

University of California, Los Angeles   *Los Angeles, CA*
Bachelor of Science in Computer Science   *Sept. 2019 - Jun. 2023*
- Relevant Coursework: Intro to Computer Science (C++), C Programming (C), AP Computer Science (Java), Intro to Computer Systems

University High School   *Irvine, CA*
High School Diploma (Weighted GPA: 4.55 Unweighted GPA: 3.90/4.0)   *Aug. 2015 - Jun. 2019*

Experience

University of California, Irvine   *Irvine, CA*
Research Intern at the Networked and Game Systems Lab   *Jun. 2018 - Sept. 2019*
- Developed secure joining protocol using data-over-sound communication
    - Reduced data transfer times by 50% by implementing data serialization method which allowed for greater amounts of data to be sent over sound
    - Built custom Java library for AES encryption and decryption of data payloads
    - Implemented data-over-sound device communication using Chirp.io SDK
- Developed native Android application used to conduct patient trials for iXercise platform
    - Enabled researchers to upload patient trial data using their phones by implementing a UDP Client-Server to communicate with middleware
    - Provided in-app access to real-time heart rate data by designing a background service that polls heart rate data being broadcast on the network
    - Incorporated device discovery using Android's native network service discovery implementation
    - Implemented user authentication using OkHttp Library

Projects

Playlist Tracker
- A native Android application that backups a list of local music playlists and songs to the cloud
- Reduced the number of expensive file queries necessary by implementing Android Room database that provides faster access to local playlists
- Implemented Spring Boot REST API with a Google Firestore database
- Utilized Retrofit library to make asynchronous POST and GET requests to REST API

Nothing But Stats
- A React website and React Native app that displays NBA player stats
- Implemented Spring Boot REST API with a Google Firestore database
- Automated removal of unnecessary Firestore documents and collections
- Prevented unauthorized API requests by implementing basic HTTP authentication
- Worked with Gson library for JSON serialization and deserialization

Easy Planner
- An Android application that creates a digital planner using text extracted from user-uploaded images of homework boards
- Currently available on the Google Play Store with over 1,300 total installs
- Extracted text from images using Google's Mobile Vision API
- Placed 3rd in California Congressional District 48 for the 2017 Congressional App Challenge

Skills

Technologies   Java, Spring Boot, JavaScript, React, Native Android Development, Retrofit, Gson, Git, Firestore