CLIVE HYUN GU LEE
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EXPERIENCE
Meta (Facebook)
Software Engineer IC, April 2020 to now
- Led a team of ~8 developers (iOS, backend devs, tech artists) that created a 0->1 standalone AR app on both iOS and Android. As the Tech Lead, took on scoping & scheduling, as well as implementing most of the Android app.
- Led the design & implementation of the first On-Device Machine Learning integration on the Facebook app, targeting Stories creation & consumption, server efficiency, and client performance.
- Optimized and improved client infra and product features for the Facebook app's Stories feature that is used by billions of users, resulting in millions of views gained per day and hundreds of thousands of dollars saved per day in server costs.
- Created an Augmented Reality android app for demonstrating integration of geo-location features.
- Designed and implemented a Oculus VR OS feature demo for moving and anchoring 2d apps to spatial anchors.
- As part of the geo-location team, created a location library for a new wearable device that can be used in various use cases.

Wayfair, Boston, MA - Home goods e-commerce
SE III, Tech Lead, February 2019 to February 2020
- Led a team of developers (full-stack, an iOS, and myself as Android developer) in bringing multiple features to the iOS and Android Wayfair apps.
- Gathered & specified requirements, breaking down features, identifying bottlenecks & blockers, estimating time and resources, and implementing the architecture to allow other teams to work in parallel.
- Architected, implemented, and released a combined-camera framework that exposed a pluggable API for camera-related features that was then used by other teams working on Camera features.
- Created a 0->1 feature that captures 3d information with a photo, allowing users to have AR-like experience using the photo.
- Mentored junior developers, co-ops, and taught classes on augmented reality, dependency injection, and android development.
- Coordinated Android tech talks to up-level other developers.
- Led the way in modularization of the codebase, creating architecture designs and documentation of best practices for all Android developers across the company.
- Improved build speeds of the apps using gradle and caching, resulting in increased productivity for all developers.

Lookout, Boston, MA - Mobile security
Senior Android Developer - Feature Lead, July 2018 to February 2019
- Lead a team of two other android developers to implement a major feature for a white-label app used by a top three U.S. carrier.
- Added functionality and maintainability in core codebase used across every Lookout apps (Lookout personal, enterprise, partners apps, and SDK), resulting in improved maintainability and reduced technical debt.
- Spearheaded an effort to identify and address critical technical debt.

Ovia Health, Boston, MA - Women's health mobile apps. Millions of users, 4.8+ stars
Senior Android Developer, May 2016 to July 2018
● Designed and architected the single-project, multi-module repository, improving development time, build speeds, testing, code maintenance, and reuse.
● Architected new features and implemented refactoring strategies using unit-testable patterns such as clean architecture layers and model-view-presenters using Room, RxJava, data binding, Kotlin, and other architecture components.
● Led and mentored the team to use design patterns, such as factory and strategy patterns.
● Identified and improved business-critical objectives, e.g. refactoring a UI that would generate millions of dollars of revenue from our clients.
● Discovered and fixed mission-critical vulnerabilities, minimizing the risk of leaking user data and ensuring compliance with industry standards. Executed on the recovery release from the security flaw, and instituted security audits.
● Implemented data encryption using various strategies tailored for different Android versions, improving the security of the app and protecting user data.
● Identified and implemented security improvements, using Android NDK and JNI.
● Designed and implemented the team's Android unit test process, evaluating and using different mocking libraries, assertion libraries, and Kotlin.
● Created gradle tasks that generated coverage reports that combined JVM unit tests and on-emulator instrumented tests.
● Architected and added dependency injection to allow mockable modules.
● Built and optimized the build and CI process, using Travis, Fastlane, bash, and gradle.
● Incorporated CI to run Android emulator and perform instrumented tests as part of Pull Request validation.
● Instituted a code review guideline used by 15+ engineers.
● Improved the general software engineering knowledge of all engineering teams by giving talks and sharing slides from my conference talks.
● Researched and implemented prototypes for new technologies such as React Native and Typescript that have the potential to cut engineering costs by half.
● Improved the UX/UI by working with the Product team.

Right From Left Software, Boston, MA
Solo Entrepreneur, January 2015 to March 2016
https://play.google.com/store/apps/developer?id=Right+From+Left
● Multiple highly-rated apps on the Google Play Store and Amazon Appstore, with 6k+ total downloads, including:
  ○ United States Code : Browse, search, share, and save all of the United States Code. Used Python to parse the USC xml data and create a searchable sqlite database.
  ○ Toggle for Toggl : Create time entries via home screen widgets using JSON/REST API
● Apps are still being maintained with the latest Android libraries.

Foley & Lardner, LLP, Boston, MA - A top 100 Law Firm in the US
Associate Lawyer, September 2013 to January 2015
● Created & persecuted patent applications in coordination with inventors and partners, including Fortune 100 software and hardware companies
● Directed foreign associates for responses to international and foreign applications

Electronics Arts, Redwood Shores, CA - One of the Largest Video Game Publisher
Software Engineer, April 2007 to June 2010
● Shipped thirteen Sims titles on the PC, the Wii, and the Nintendo 3DS
● Implemented gameplay features using C++, Lua, and Edith
● Worked in multidisciplinary teams, including product managers, producers, and designers, artists, and testers

- Designed and implemented new features to the language, build tools, and artist tools
- Created and solved asset pipeline, DRM, localization, and installer features and issues
- Authored requirements for gameplay systems

EDUCATION

Stanford University, Palo Alto, CA
M.S., Computer Science, April 2007

University of Colorado, Boulder, CO
B.S., with distinction, Computer Science, May 2005
Minor in Applied Mathematics with an emphasis in Probability and Statistics

Boston University School of Law, Boston, MA
J.D., May 2013
Journal of Science and Technology Law, Article Editor

DEVELOPER CONFERENCE SPEAKER

Android Makers Paris 2018 - April 23rd
Commonly Overlooked Areas of Security Revisited
Droidcon Boston - March 26, 2018
Pragmatic Gradle for Your Multi-Module Project
Droidcon London - October 26, 2017
Commonly Overlooked Areas of Security - http://uk.droidcon.com/#program
Google Development Group, Boston Meetup - July 18, 2017
Google I/O 2017 Lightning Talk on Android Studio Tools & Builds - https://goo.gl/cuAZrX

LANGUAGES, SKILLS

- Proficient in Kotlin, Java and the Android SDK, Architecture Components, Git, Gerrit, Gradle/Groovy, Android libraries (e.g. Dagger2, RxJava, Room, Picasso, Okhttp, Retrofit, GSON, Volley, Robolectric, Mockito, and Truth)
- Experience in Python, Flutter/Dart, JavaScript, Typescript, Google Apps Scripts, YAML, Bash, SQL, Unity, Visual Studio, C#, and really anything to solve a problem.
- A lapsed 4-dan Go / Baduk / Weiqi player