Dinesh Shanmugam C

Built mobile software for 30 million users worldwide



SUMMARY

- 8.8 Years of experience in Android App and framework Engineering
- Build E-Commerce Mobile apps that scaled to 30+ million users worldwide
- Mentored and managed a team of 20+ Mobile Engineers
- I blog at https://medium.com/@dinesh.hema99
- Have worked in Start up as well as Enterprise setup

TECH SKILLS

- Programming languages : Java, Kotlin, Python, Ruby, Go lang
- Mobile development : Android
- Build System: Gradle
- Unit testing : JUnit, Espresso, Mockito
- Dashboarding and Visualization : ELK (Elastic, Kibana)

EXPERIENCE

Gojek, Software Engineering Manager - Mobile Feb 2018 - Present

redBus, Software Engineering Manager - Mobile Mar 2019 - FEB 2020

redBus, Tech lead - Android MAR 2018 - MAR 2019

redBus, Senior Software Engineer - Android MAR 2016 - MAR 2018

Sasken Communication Technologies, Senior Engineer - Android MAY 2014 - MAR 2016

SRM Technologies, Software Engineer - Android Dec 2011 - MAY 2014

PROJECTS

Gojek Mobile Engineering - ~50 million installs and 240k daily active users

Tools: Android, iOS, Gradle, Gitlab, Ruby, ELK, Rest API's, Firebase

Responsibilities and Achievements

- Building mobile infrastructure for 140+ Android and iOS Engineers and 20 different gojek apps
- Leading a team of 7 Android and iOS Engineers
- The work that we do contributes to the wellbeing of millions of people in South East Asia
- Reduced the build times of Android App by over 70% leading to faster development and iteration times
- Build a whole system to measure and democratize data on developer productivity within the organization
- Involved in Product Development. Leading the conceptualization, development, adoption of the product

redBus consumer App - ~10 million installs & 600k daily active users

Tools: Android, Kotlin, Gradle, Firebase, Python, Golang

Responsibilities

- Responsible for leading a 20 member mobile team and engineering feature for 6 users in 6 countries
- Responsible for coordinating engineering efforts with Product Managers
- Architected a considerable part of the App from scratch (Live tracking, Payments) for scale

- Improved app start up times by 20%
- Reduced heap memory consumption by 24%
- Reduced the size of the app by 12%
- Brought in the culture of 'Engineers as Product Engineers'
- Set up the entire CI/CD pipelines for faster development and iteration(GITLAB, Jenkins). This cut down time to market from '7 days to 2 days'
- Successfully mentored interns and budding Software engineers. Initiated an intern recognition program. <u>Here</u> and <u>here</u>.
- Evangelized redBus as an Engineering brand by blogs and through getting featured in Google IO(2019)

White Label Android SDK Development

- This was an SDK for redBus partners where they can integrate and customize the SDK
- This powers an entire booking flow with very less amount of code

Reviews Tagging - Machine Learning

Tools: Scikit learn, Python, Flask

Responsibilities:

- Built a machine learning model which can tag important contextual information from user generated reviews
- Used NLP techniques to mine important information from reviews
- This provides users an intelligent and easy way of selecting products
- The project provided a way for Product teams and engineers to proactively act on feedback from end users

User Activity Tracking Framework (AOSP)

Tools: AOSP, Android, JAVA

- Individually developed the user tracking module for an Android OEM
- The module tracks the time spent on each activity of the application and can be analysed

Assistant app - Cyanogen (Android app integrated into AOSP)

- The app servers an as assistant to consolidate information from the interests chosen by the user
- The app uses Rest api to get the relevant information
- The app is integrated into the AOSP framework so that It can be opened by swiping on the home page of Android
- The app is very similar to Google Assistant

NXP Widget development (Android widget + Settings App)

- Developed an android app widget using a custom build animation framework
- The widget is configurable through a settings app
- The widget displays information from multiple sources through Rest API call and content providers

Widget animation framework (Android Open Source Platform)

- Demonstrated that animations were possible on App Widgets which enabled us to win the Project
- Architected and engineered an Animation framework for Android Widgets within 2 weeks
- Modified the AOSP framework to include animation support and also made sure CTS passed

AWARDS and RECOGNITIONS

- Go-Trooper of the year 2018: For achievement in mobile engineering at redBus
- Mentions by Google in the developer website
 - https://developer.android.com/platform/technology/app-bundle#20
 - https://developer.android.com/jetpack/testimonials
 - https://developer.android.com/stories/apps/redbus
- Held chair position in University ACM Chapters and organized several tech events

EDUCATION

- B.E Computer Science and Engineering (2005-2009) with 74.5% from Anna University, India
- M.Tech in INformation Technology(2009-2011) with 8.9 CGPA from SRM University, India