Trung Tran

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Android Developer. Self-Starter. 6+ Years of Experience. Previously core Android SWE at Samsung Electronics, South Korea. Looking for remote SWE job.

Employment History

FEB 2016 – OCT 2021: **SAMSUNG ELECTRONICS, KOREA - SOFTWARE ENGINEER**

Achievements:

- Core developer of Samsung Notes app, which has over +1B downloads and +3.5M reviews (4.7/5 rating). This app is the driving force behind the success of the Galaxy Note Series. For my contribution to the project, I received the Samsung Employee of the Year award in 2019. Samsung Notes app: https://play.google.com/store/apps/details?id=com.samsung.android.app.notes
- Developed and commercialized innovative features for the new version of Samsung Notes: infinitive page, quick sync, smart undo/redo, etc. These features received very positive reviews from the users and helped increase the rating of the app from 4.5 to 4.7 (under +3.5M reviews).
- Filed a patent for smart Undo/Redo feature of new Samsung Notes app: http://link.kipris.or.kr/link/main/sharePage_EN.jsp?reg_key=gaXejDaQeuOtyJld32oYgA==&APPLNO=1020200097192
- Implemented JNI cache manager to improve performance of API calls between native and Java (30% faster). This is a very meaningful improvement because callings between Java and Native are costly operations and there are many cross layers calls in the app.
- Contributed to the success of launching and commercialization of many Samsung flagship models: Galaxy Note 8, 9, 10, 20 | Galaxy S 9, 10, 20, 21 | Galaxy Z Flip 3.

Leadership:

- Led a team to analyze requirements and implement native Undo/Redo feature of SPEN SDK, which directly supports Undo/Redo feature of Samsung Notes, PENUP, etc.
- Led a team to infuse TDD into our team's software development culture. Achieved 98% function coverage, 80% line coverage (from 70%, 60% in the beginning). This effort improved our code quality significantly and is a good preparation for future refactoring.
- Led a team to develop many automation steps (using Jenkins CI/CD and customized scripts) for our software development process. Slashed ~100% time cost of running native test cases locally.
- Passionately taking part in team's code review and technical ideas brainstorming sessions.

Skills & Tech Experiences:

- Have extensive experience with modern Android frameworks and architecture, building scalable robust applications that feel light and performant (Architecture components/Dagger/Hilt, MVVM/MVI, JNI using NDK). Possess deep know-how and understanding of the Android SDK, NDK internals and how to optimize for performance and data usage(async operations/thread safety/memory optimization).
- Have comprehensive know-how about mobile apps development cycle.
- Well-versed in Data Structures, Algorithm, System Design and Design Pattern.
- Ability to understand and debug large and complex code bases.
- Experienced with CI/CD and build/release tooling (Gradle/CircleCI/Jenkins/Github Actions).
- Experienced with developing and maintaining unit and UI tests.
- Able to clearly identify, communicate, and document technical tradeoffs, and guides others to do the same.
- Willing to mentoring, sharing knowledge and technical presentations.

Education

FEB 2012 – FEB 2016: **HANYANG UNIVERSITY, KOREA - COMPUTER ENGINEERING STUDENT**

- Recipient of the Korean Government Scholarship (KGSP) for outstanding international students.
- Recipient of Hanyang University Scholarship for excellent students of Department of Computer Engineering.

What do people say about me?

Konsang Lee - MBA candidate at MIT Sloan - Class of 2024 | Expert programmer at Samsung

- *At Samsung, it was my greatest pleasure to work with Trung Tran. He had always shown passion to learn and challenge new tech domains. Especially, I was very impressed when he showed sincere collaboration to apply Test Driven Development methodology for the first time in our project. I would proudly recommend Mr. Trung Tran to any software development position that requires algorithmic skills and software problem solving abilities. I am sure that he shall grow into a tech guru who spearheads great innovations in the tech industry.*
  LinkedIn: https://www.linkedin.com/in/konsang-lee-5aa005194/

Yong Wang - SWE at Microsoft

- *Trung Tran is one of my best friends and roommate at Hanyang University, Seoul, South Korea. He has an extremely solid background in computer science. Trung is one of the most hardworking students I have ever known. He used to code late at night most of the time when I had already gone to sleep. That was not that annoying but the late night phone calls were, haha. Trung launched several projects that I find fascinating, be it mobile games or full stack websites. I think of our happy time together back in Seoul often.*
  LinkedIn: https://www.linkedin.com/in/yong-wang-0b236987/

Tung Nguyen - Senior SWE at Scopic Software

- *Trung is one of the most strategic and smartest guy I ever met. He is very smart and had a very good memory. He can learn and apply things quickly without any mistake. Trung is one of the most strategic and smartest guy I ever met. He is very smart and had a very good memory. He can learn and apply things quickly without any mistake.*
  LinkedIn: https://www.linkedin.com/in/mt26691/

Some interesting facts about me

What's your favourite thing that you've worked on and why?
I have worked on the SPEN SDK project when I was at Samsung Electronics. The SDK includes many interesting pieces of software, ex: text layout, data processing, rendering, recognition, etc. My job was to find solutions for problems related to new features or optimising performance of existing features, etc. I like challenging technical problems because that helps me learn and grow my technical and leadership skills.

Tell us about a performance problem in an application or library you've worked on?
I made an improvement related to the communication between Java and Native layers via JNI that helped increase the performance of the whole SDK ~30%. My observation of our SDK is that when a Java object wants to call its native method, the native method will have to ask the Java object about its native instance id. However, if I include the native instance id as a parameter of the call from Java to Native, there will be no need for a call from Native to Java to ask for that id.

Tell us about a project where you learned a lot. What would you do differently?
I had a chance to lead a team to analyze requirements and implement native Undo/Redo features of SPEN SDK, which directly supports Undo/Redo features of Samsung Notes, PENUP, etc. This was the first time I worked as a team leader instead of an individual contributor. The experience helped me learn a lot about prioritizing and dividing tasks, coordinating with other teams, CI/CD, etc. Moreover, during this time, I also invented a method to perform Undo/Redo effectively on mobile devices, you can take a look at my proposing patent (just filed, not granted yet) here:
http://link.kipris.or.kr/link/main/sharePage_EN.jsp?reg_key=gaXejDaQeuOtyJld32oYgA==&APPLNO=1020200097192

What would I do differently? I don't know yet because I did try my best :)
My motto is: Respect the opportunities!