Adrien Nabonne

Senior Software Engineer, Android Tech Lead

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∘ San Diego, CA ∘ Open to Remote

SUMMARY

With a passion for developing cutting-edge mobile applications and leading teams to foster technical, personal, and interpersonal growth, I bring over 10 years of expertise in Android development, complemented by experiences in Embedded Software and Full-Stack dev. My tenures at Twitter, Smule, and Nuance demonstrate my ability to deliver highly engaging and innovative user-experiences, driving user growth and enhancing platform integrity—whether in established products or "greenfield" projects.

SKILLS

Competencies: Technical Leadership, Mentorship (20+ engineers), Mobile System Design & Architecture, Android App Development, Platform Health, Account Security, Natural Language User Interface, Automotive User Experience, Agile project management, CI/CD, DevOps, LLM and RAG
Programming: Java, Jetpack Compose, Kotlin, Coroutines, Flows, RxJava, MVVM, MVI, dagger, hilt, JNI and C/C++, React, JavaScript, SQL, Python and Flask, LangChain
Tech Stack & Tools: REST/GraphQL, Firebase, Crashlytics, Scribe and HDFS, Zeppelin, Big Query, Git, Phabricator, Gerrit, Gitlab, Github actions, Jenkins, WebAuthn, FIDO2, Gradle, AndroidX Test
Languages: Bilingual French and English.

EXPERIENCE

Career Break: Primary care-giver for 2 toddlers, supporting my wife's major career transition. Caught up with the latest in Android development & explored Gen AI through self-directed learning and experimental projects.

Twitter, San Francisco, CA   *1/2020−1/2023*
Android Tech Lead, Platform Health and Integrity

Led a high-performing Android team of 2 mid-level engineers to drive critical solutions for Toxicity, Misinformation, and Account Integrity, collaborated extensively with cross-functional partners within the Heath org (Back-end, Data Science, Product, Policy, etc.) and across feature teams.
 ● Planned, specced, built, rolled-out and analyzed more than a dozen projects applying visible treatments (e.g. labeling, engagement disabling or nudging) on all surfaces of the app.
 ● Personally mentored Android engineers on my team and of the greater Health organization. Jointly led bi-weekly meetups for a pod of 12 engineers. Participated in the hiring of new engineers.

Key impacts:

 ● Overhauled the entire Login flow for all Android users of Twitter, introducing a back-end driven and stateful flow. This vastly improved the security of our users' accounts, directly through the addition of strong 2FA methods (e.g. Security Key), and indirectly by powering new monitoring and detection capabilities.
 ● Implemented the famous fact-checking labels on Tweets ahead of the 2020 Presidential Election and at the beginning of the Covid Pandemic. Powered the main misinformation metrics for the Health organization.
 ● Drove and implemented a Retweet-disabling feature to proactively stomp-out misinformation during French and Brazilian election cycles. Based on the real-time monitoring of written tweets. It reduced impressions of infringing tweets by 11% while adding minimal friction.
 ● Drove and supported the Platformization of our Health treatments: Shipped a refactor of our Engagement Nudges which reduced the time-to-market of new Nudges from 3 months to 3 weeks (a 77% reduction).

Smule, San Francisco, CA   *9/2017−11/2019*
Senior Software Engineer, Award-winning Video Karaoke App "Sing!"

Lead engineer for a team of 4-8 junior and mid-level **Android** engineers, in an Agile-based start-up

environment, on 2-week release cycles, delivering 10+ Tb/day to 40M active users and 2M paying subscribers. App revolves around video playback, recording, splicing, and streaming, as well as social features. UX involves a fragment-and-tab-based UI with infinite-scrolling feeds, paywalls and inline ads, push notifications, and a multi-user chat (Jabber/XMPP). Led our Android Developers' meeting. Interviewed, mentored and coached junior members and contractors (including 2-3 offshore engineers based in Minsk).
Additional responsibilities:
 ● Refactoring efforts around common pain-points (chat, media sessions, inline-adds, songbook) –this allowed me to greatly increase development velocity for the whole team.
 ● Difficult-to-repro bugs like memory issues or odd/adversarial user behaviors –freeing up other devs to focus on feature-work.
 ● Release management, syncing with DevOps or QA on CI/CD issues –keeping our release cycle on schedule.

Key projects I personally led and implemented:

 ● A "greenfield" stand-alone feature allowing **real-time** multi-user karaoke. Brought it from alpha to GA.
 ● A complex UI revamp of the core video player screen, doubling comment impression and engagement.
 ● A complete overhaul of media playback and app startup performance metrics.

Nuance Communications, *Cambridge, MA*   *6/2012–2/2017*
Senior Software Engineer,

Automotive voice-powered assistant, Innovation Award at CES 2016 (9/15 – 2/17)

Developed in **React/JS & Java**, in a product-based team of 5-7 devs, for a cross-platform demo application of the Dragon Drive stack (Text-To-Speech/voice-recognition/NLU) to showcase Nuance's in-car solutions. Built and delivered a jar app and a React/JS front-end running on Windows and Android tablets.
 ● Coded both UI and business logic components, from core functionalities –like WebSocket/HTTP communications and dialog state handling–, to domain specific ones – navigation, parking, media player, etc
 ● Led client side development of a "Name That Tune" voice-powered multiplayer game feature for passengers.

Android voice-powered assistant app, Dragon Mobile Assistant (6/12 – 9/15)

Developed in **Java**, in the same small product-based team, for a free fully-fledged personal voice assistant, showcasing Nuance's Natural Language Processing stack. Maintained above 4.5/5★ on US Google Play store. Implemented features spanning the entire Android stack: rich UI components and animations, background services, notifications, power and lockscreen management, Bluetooth/embedded audio interface, 3rd-party apps and libraries integrations.
 ● Coded an in-app browser, an always listening wake-up-word, and various calendar, call, messaging, driving-detection and location-sharing services.
 ● Integrated Nuance's embedded and remote voice stack, as well as 3rd-party APIs –Fb, Twitter, Spotify.
 ● Additional Android side-projects: a voice-controlled music streaming app (which won an internal hackathon innovation award) and a news & weather assistant.

Parrot, *Paris, France*   *3/2010–1/2012*
Embedded Software Engineer, Automotive hands-free multimedia electronics

Development in Android / AOSP (11/10 – 1/12)
I owned the development of the Home screen app on the Parrot Asteroid car-stereo, running version Eclair (2.0) of the Android Open Source Project. Acquired a multi-level understanding of the Android platform, from application-level through HAL and Linux Kernel. Designed and implemented steering wheel commands, integrated a Paser CANBUS interface.

Development in C (3/10 – 10/10)
Coded and debugged firmware updates for various Parrot devices running eCos (a RTOS).
 ● Worked on high-level components, User-Interface, libraries, and kernel.
 ● Participated in the refactoring of the RKi firmware, focusing on integration issues.

EDUCATION

M.S. in Computer Science, Institut Supérieur d'Electronique de Paris, *Paris, France*
French Engineering Diploma (5-year degree). Obtained with distinction. Concentration in Embedded Systems.

International Exchange Program, National Chiao Tung University, *Hsinchu, Taiwan*
Semester of grad. studies in Biomedical Circuits & Systems, Nanomaterials Science, and Management Accounting