Romain Boulay · Senior / Staff iOS Engineer

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SUMMARY

18 years of experience, on Apple platforms since 2008 and the iOS SDK since 3.0. Five years at SoundCloud, one of the largest music platforms, the last three as iOS Platform Lead (principal-level), leading architecture and performance on a 550,000-line app (36 modules, 15,000+ unit tests) while we shipped new features for listeners and creators. Since 2024 at Amazon Shopping, on cart and checkout web experiences that also run inside the iOS and Android apps, and on multi-agent GenAI. Photographer since 2010 (a Nikon D3100 then, a Fujifilm X-T50 with film-simulation recipes now): I edit in Lightroom, print photo books of our trips and go to exhibitions.

- **Led the work that cut cold start 5.1s → 1.7s** at SoundCloud, worth **+6% listening time and +9% searches**.
- **Product-minded, close to designers** at every company: I own features from sketch to measured release.
- **40+ shipped iPhone and iPad apps** · 20 end to end at Intellicore (RATP, MacBidouille, Thesorimed) · 15 on the framework I designed at PlayAdz (Nature64, Cap3000) · SoundCloud, eero, Wimdu, myDriver.

CORE SKILLS

Apple platforms · Swift, Objective-C, SwiftUI, UIKit · modularization, dependency injection, feature flags · startup-path profiling, build-time reduction · Thread Sanitizer, Main Thread Checker · unit, snapshot and UI tests.

Product & architecture · features built with designers and PMs · A/B testing · KPI-driven product reviews · mobile architecture for up to 18 engineers across 7 teams · cross-platform module strategy on a shared RPC contract.

AI · multi-agent prototypes in Python on AWS Strands, multimodal (text + image) systems, RAG · daily AI-assisted development with Cline, Kiro IDE and Kiro CLI, plus agents for ticket triage, on-call firefighting and PR review.

Also · Java, Kotlin, Python, TypeScript, Scala, Go · React, GraphQL · AWS (CDK, Lambda, DynamoDB).

EXPERIENCE

Amazon, Senior Software Engineer · *Berlin, Sep 2021 – Present*

Amazon Shopping (Gifting) · *Jan 2024 – Present* · cart, checkout and AI-powered shopping experiences: a Java backend rendering HTML and JS for desktop and for the Amazon iOS and Android apps.

- Designed and led a multi-agent GenAI prototype for gift recommendations (Python, AWS Strands, Claude on Bedrock), writing its harness and query logic. The model turns a photo of the recipient into a fixed taxonomy matched against a product index, so results stay predictable. It refocused the 2025 roadmap on AI foundations.
- Wrote the mobile and desktop designs moving gifting onto Amazon's next-generation checkout platform and launched the cart gift flows in all marketplaces before Prime Day, in a migration covering nearly all gifting orders.
- Authored a 3-year architectural plan for a $600M+ revenue opportunity, aligning 15+ partner teams; it freed 125 engineering-weeks of compliance work (–45% year on year).

Amazon eero / Amazon Leo (formerly Project Kuiper), Mobile Lead · *Sep 2021 – Dec 2023*

- Led mobile architecture for Amazon's satellite-broadband product: set the module strategy across iOS, Android and cloud on a shared RPC contract, and designed how Leo's new SwiftUI app reuses eero's iOS code.
- Moved the 7-year-old eero iOS codebase from CocoaPods and a hand-maintained Xcode project to Tuist and created 8 of its 11 modules, then extracted the shared ones for Leo. Owned the toolchain for 19 months.
- Built the remote feature-flag system (live updates, debug overrides; 28 flags gating new hardware) and a push-notification module shared with Leo, adopted by all three eero mobile teams.
- Lifted the eero app's App Store rating from 3.2 to 4.6 by rethinking, with design, when and how the app asks for feedback: only after success moments (a speed test, a backup), with an A/B-tested pre-prompt that offers an email feedback path.
- Acting engineering lead for 6 months while both leads above me were on leave, plus some product work.

SoundCloud, iOS Platform Lead · *Berlin, 2018 – 2021 (Mobile Engineer, 2016 – 2018)*

The top iOS engineering role, principal-level: technical lead for the iOS collective (up to 18 engineers across 7 product teams), owning the architectural vision and consulting on the company's most critical iOS programs.

- **Product** · shipped Search recommendations, Charts, Playlist Discovery, Streaming Quality settings and Search Top Results (custom collection-view and iPad layouts) with designers and PMs, plus onboarding and result experiments. Prototyped play-session analytics that measure listening time.
- **Performance** · led the work that cut cold start 5.1s → 1.7s (A/B-tested), then ~1.0–1.1s by 2021, through startup-path fixes, targeted modularization, static linking and dependency-injection cleanup. Optimized offline-download sync in Core Data (fetch-and-delete path, change observation off NSFetchedResultsController). Built xcframework binary caching: build times –27% overall, –42% on the main app target.
- **Quality** · drove crash-free users from 94.5% to 99.5% in twelve months, partly through a thread-safety overhaul: surfaced data races and off-main-thread UIKit calls in everyday development, then fixed them from Core Data to the startup path, while the iOS audience grew 60M → 110M monthly users.
- **SwiftUI** · decided and drove a partial UIKit → SwiftUI rewrite to simplify the codebase and its maintenance, wrote the SwiftUI module architecture guide, and made SwiftUI the default for all new features.
- **Engineering process** · defined the iOS code-review process and on-call rotation, later adopted across the wider engineering organization; ran the iOS guild and the hiring loop, and maintained the CI and release tooling.

Brainly, Senior iOS Engineer · *Berlin, 2015 – 2016*

Helped grow the iOS audience 100K → 200K monthly users. Introduced pair programming, code reviews, CI and KPI-driven product reviews, and promoted agile and cross-functional pairing.

Wimdu, Lead iOS Engineer · *Berlin, 2014 – 2015*

Built the Host iOS app and its APIs from scratch, then scaled the mobile team to 9 engineers. Shipped Guest, one of the first fully-Swift production apps, on a shared framework powering both apps.

myDriver (Sixt), Lead iOS Engineer · *Berlin, 2013*

Rewrote the Driver app from scratch and refactored the public Customer app; led iPhone/iPad architecture, UX design and the shared framework behind both.

PlayAdz, iOS Developer · *Nice (France), 2011 – 2013*

Designed and developed an iOS enterprise framework powering 15 native apps (incl. Odysseum, Cap3000, Cannes is Yours), plus mobile strategy consulting. Tech lead on the Aisne city-guide apps (Soissons, Saint-Quentin, Laon), where I built an augmented-reality camera view overlaying historical images on monuments, and on Nature64, first prize at the Rural'TIC 2012 European innovation awards.

Intellicore, iOS Developer · *Nice (France), 2008 – 2011*

Joined as an intern at the start of the iPhone era, in a 5-engineer team; shipped 20 iPhone and iPad apps end to end (incl. Horizon, Fabled Lands), among them an Essilor vision-test prototype driven by keyframed animation.

OPEN SOURCE

Core team member of Tuist (2020–2022), the open-source build system and developer-experience toolchain for Xcode projects. I built its **remote binary cache**: target-graph hashing, cache store and fetch, static frameworks.

EDUCATION & LANGUAGES

- M.Sc. Computer Science, Polytech Sophia-Antipolis, *Université de Nice (France)*, 2006–2009.
- DUT Computer Science, IUT Aix-en-Provence, *Université de la Méditerranée (France)*, 2004–2006.

French (native) · English (full professional) · German (B1) · Italian (basic).