

Ky Leggiero

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Staff Software Engineer — Technical Leadership, Systems & Platform Engineering

19 years leading platform engineering and large-scale technical modernization across Apple platforms, backend systems, and applied AI. Repeatedly brought in for migrations, greenfield builds, and platform consolidations to set technical direction and then build the infrastructure and practices the team relies on afterward. Deepest expertise is in Swift and the Apple ecosystem, backed by real production experience in JVM and Android, networked security systems, knowledge-graph and data systems, and a self-built AI agent (AnacacuyaBot) orchestrating local language models.

SELECTED HIGHLIGHTS

- Most recently, led a Swift-concurrency migration across 100+ engineers at Major League Baseball — cutting concurrency crashes roughly 95% with zero downtime on a million-line codebase
- Ships "batteries-included" repo automation — setup, build, signing — as a running habit across nearly every role, including standing up CI/CD from zero at two companies
- ~10 years of JVM development across Java, Kotlin, Scala, and Clojure — academic, personal, and production work at NCR and Yes Health
- **30+ published open-source Swift packages**, alongside deep production experience in structured concurrency and SwiftUI
- Built **AnacacuyaBot**, a Swift-native agent orchestrating multiple small local models for on-device inference on consumer hardware
- Built **Simpedia** (2007–2009), once the world's largest fan-built knowledgebase, and has worked in production with graph systems since

CORE SKILLS

- **Leadership** — technical direction across 100+ engineer organizations, cross-team migration leadership, founding/greenfield engineering ownership, hiring & team growth, mentorship, customer-facing technical communication
- **Languages** — Swift (expert: structured concurrency, SwiftUI), Objective-C, Kotlin, Java, C/C++, Rust (working); ~10 years JVM (Java Virtual Machine) development across Java, Kotlin, Scala, and Clojure
- **Platforms** — iOS, iPadOS, macOS, watchOS, tvOS, Android, Windows, Linux — native mobile & desktop development, cross-platform architecture, multi-OS consistency
- **Build & infrastructure** — CI/CD (Continuous Integration / Continuous Deployment) ownership from zero: Bitrise, Azure DevOps, GitHub Actions, Jenkins, CircleCI; release engineering, build systems, repo-embedded build/signing tooling, monorepo strategy
- **Data & AI/ML** — knowledge-graph design (Neo4j, GraphQL/Apollo); applied AI/ML (artificial intelligence / machine learning) — local large language model (LLM) / AI agent orchestration, edge & resource-constrained inference, fine-tuning, LoRAs, prompt engineering, evaluation frameworks
- **Security** — public-key cryptography, Diffie-Hellman key exchange (DHKE), encrypted sync, secure networking, information security (InfoSec)

EXPERIENCE

Major League Baseball · Senior Software Engineer <i>MLB for iOS / iPadOS / watchOS / tvOS · Entertainment</i> • Led technical direction for a company-wide concurrency migration across 100+ engineers, cutting crash rates ~95% • Built the migration roadmap, tooling, and documentation that made the rollout self-service for other teams • Unified the cross-platform layer behind a single codebase serving four Apple platforms at once <i>Swift · SwiftUI · Swift Concurrency · universal apps · monorepo · custom frameworks</i> Left: contract completed	2024–2026
Realtor.com · Staff Software Engineer <i>Realtor.com for iOS · Real Estate</i> • Led the technical direction for a full app redesign, including the core UI migration and the design system behind it • Built and documented a reusable component library adopted across feature teams • Founded cross-team working groups to raise engineering practices company-wide <i>Swift · SwiftUI · Apollo/GraphQL · design systems · repo scripting</i> Left: position eliminated (market-driven layoffs)	2022–2023
Yes Health · Founding Software Engineer <i>Yes Health for iOS & Android · Healthcare</i> • Founding engineer: built the iOS/Android platform and its engineering practices from the ground up, including choosing and standing up CI/CD from nothing • Migrated the codebase from offshore Objective-C/UIKit to in-house Swift/SwiftUI • Grew the team 1→3 engineers as sole hiring manager; set sprint, version-control, and documentation standards <i>Swift · SwiftUI · Kotlin · GraphQL · Bitrise CI/CD · iOS/Android · startup</i> Left: company ceased operations	2021–2022
PKWare · Senior Software Engineer <i>Encrypted eMail, SmartCrypt · Infosec</i> • Tiger team on greenfield email-encryption R&D and the internal libraries supporting it • Rebuilt the iOS encryption app from the ground up, improving accessibility and core flows • Early contributor to the team's Azure DevOps CI <i>Swift · cryptography (public-key, DHKE) · Azure DevOps CI/CD · macOS/iOS · repo scripting</i> Left: position eliminated	2020–2021
Ionic Security · Software Engineer III <i>Ionic Files for macOS · Infosec</i> • Owned the user-facing macOS file-encryption & sync client • Contributed to a cross-platform consistency layer spanning macOS, Windows, Linux, iOS, and Android • Partnered with QA to tighten the test/release cycle and reduce defects <i>Swift · Objective-C · C/C++ · encryption · macOS/Windows/Linux · CI/CD · startup</i> Left: position eliminated	2017–2019

AI/ML & KNOWLEDGE SYSTEMS

AI/ML development (2013-present)

- AnacacuyaBot** — a Swift-native AI agent orchestrating multiple small local models (SmolLM3, Moondream, etc.) for on-device inference across macOS/Linux/Windows on consumer hardware (GTX 1060, M4 Pro). End-to-end ownership: model selection, orchestration logic, prompt engineering for small models, resource-constrained optimization.
- Creating, fine-tuning, and deploying bespoke models; experience with ANNs alongside genetic algorithms and other non-ANN approaches.
- OSS model workflows (Stable Diffusion, Flux, Llama, Dolphin Mixtral); LoRAs, evaluation frameworks, ComfyUI.

Data systems & knowledge graphs (2008-present)

- Built Simpedia (2007–2009), then the world's largest knowledgebase on The Sims.
- Production work with SQL/NoSQL, GraphQL+Apollo, Neo4j, and custom graph/object-store implementations; built wiki platforms from scratch.

EDUCATION

- Columbus State University (2014) — B.S. Computer Science (Software Engineering, AI, Games Programming, Databases, Networks, Architecture, Operating Systems)

Georgia Gwinnett College — supplementary studies (calculus, music, philosophy, sociology)