

Lucas Firmo

Applied AI Engineer · agent systems · São Paulo, Brazil (remote, US hours) · Contractor or EOR ready
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SUMMARY

Senior engineer (13 years, iOS through full-stack) who builds and operates multi-agent systems that ship real production code. I designed the system my team's production work now flows through: parallel AI agent lanes, a cross-model review gate, proof required on every change, default-deny around production, and automated merge and release. I work best close to the user of the system: find where it fails, and turn each failure into a tested guard.

EXPERIENCE

Senior Engineer (iOS, full-stack, agent systems) · Pray.com · Remote · Aug 2020 to present

Agent systems (2026 to present)

- **Designed the delivery system my production work now runs through:** AI agents work tickets in parallel lanes, each in its own worktree, with ticket claims that refuse two agents on the same files.
- **Built a cross-model review gate enforced in code:** a PR cannot open until a separate AI session, preferably from another model family, signs a passing review of that exact commit.
- **Made proof a merge requirement:** every agent PR carries a screenshot, captured output, or the same check failing before the fix and passing after it. UI changes cannot pass on text alone.
- **Kept agents safe around production by default-deny:** cloud changes, production database writes, deploys and messages sent as we wait for a human; a production write is refused unless its exact SQL is in a team-approved PR.
- **Ran a production Swift 6 migration as four parallel agent lanes** split by directory so they never collided: zero concurrency warnings in 10 days, through small reviewed PRs.
- **Kept the fleet running unattended:** automatic merge and release chain with production always held for a human, agents moved to another model when one hits its quota, and scheduled jobs watched by a heartbeat.

AI in the product

- Shipped an in-app AI chat assistant on iOS, automatic language detection for the content catalog, and AI PR-review bots in the iOS CI pipeline.

Engineering outcomes (iOS, web)

- Migrated the iOS app to Swift 6 language mode in 10 days while the unit suite grew 25%.
- Found ad-free subscribers being served ad-carrying audio on one path, and fixed it with a regression test.
- Closed a PII and API-key logging leak in a serverless leads pipeline.
- Led the website cutover from Gatsby to Next.js with zero lost URLs.
- Shipped in Swift, TypeScript/Node, Next.js/React, Kotlin and AWS Lambda in the same year.

Earlier: iOS engineer, 2013 to 2020

Globo.com (sports app, national audience) · Gigigo (McDonald's Brazil app) · Itaú Unibanco · Dafiti · Apple Developer Academy

SKILLS

Agent systems: Claude Code, Codex, multi-agent orchestration, cross-model review, agent guardrails and approval gates, evaluation of agent output (baselines, red-then-green proof), hooks, headless agents, cost and quota management

Engineering: Python, TypeScript, Node.js, Next.js, React, Swift, SwiftUI, Kotlin, Bash, AWS (Lambda, CloudFront, CloudWatch), MySQL, CircleCI, Stripe

Working style: owns problems end to end, measures before and after, writes incident reports and design notes

EDUCATION

B.Sc. Information Systems, Universidade Presbiteriana Mackenzie, 2014 · Apple Developer Academy, 2013 to 2014

Languages: Portuguese (native), English (professional)