

JOHNSON ELANGBAM

STAFF / LEAD IOS ENGINEER • IOS ARCHITECT • AI/ML ON-DEVICE ENGINEER

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18+

YEARS IOS ENGINEERING

99%

CRASH-FREE (FROM 96%)

70%

FASTER CI/CD RELEASES

5,000+

LOCATIONS SHIPPED TO

PROFESSIONAL SUMMARY

Staff / Lead iOS Engineer with 18+ years architecting and shipping enterprise-scale mobile platforms for Fortune 500 clients — Ford Motors, AutoZone, Avaya, and Thomson Reuters — across VoIP, automotive, retail, and real-time communication domains. Proven record of turning struggling codebases into stable, scalable systems: raised crash-free sessions from 96% to 99% (~ 70% fewer crashes), cut CI/CD release cycles from weeks to minutes, lifted feature delivery velocity by 30–35%, and cut production defects by 40–50% through Clean Architecture, MVVM, and Swift Concurrency. Combines deep VoIP/SIP/PJSIP expertise with hands-on leadership — architecting systems, mentoring 4–5 engineers, and remaining ~50% hands-on in Swift/SwiftUI. Now extending this 18-year foundation into AI-powered iOS tooling and on-device ML (Core ML, Vision, SwiftSyntax, MLX, local & cloud LLM integrations) through actively maintained open-source projects. including a Homebrew-distributed Swift static analysis CLI with full GitHub Actions CI/CD and automated release pipeline.

CORE COMPETENCIES

iOS System Architecture • Staff / Lead Engineering & Mentorship • VoIP & Real-Time Communication • Clean Architecture & MVVM • Swift Concurrency • AI/ML & On-Device Inference • CI/CD & DevOps Automation • Cross-Functional Stakeholder Leadership

TECHNICAL SKILLS

Languages: Swift, SwiftUI, Objective-C, Python (ML tooling)

Architecture & Patterns: Clean Architecture, MVVM, MVC, Modular Architecture, Dependency Injection, Protocol-Oriented Programming, Repository Pattern

iOS Frameworks & SDKs: UIKit, AVFoundation, Core ML, Vision Framework, Core Data, Core Animation, APNs, URLSession

VoIP & Real-Time Communication: SIP, PJSIP, WebRTC, XMPP/Jabber, CallKit, VoIP Push, AVAudioSession

Concurrency & Performance: Swift Concurrency (async/await, Actors), GCD, Instruments, Memory Management, Thread Safety, Performance Profiling

Testing: XCTest, Kiwi/Cedar, Unit & UI Testing, TDD, Code Coverage, Pair Programming

CI/CD & DevOps: Fastlane, GitHub Actions, CircleCI, Atlassian Bamboo, Concourse CI, TestFlight, App Store Connect

AI/ML & On-Device: Core ML, Vision Framework, coremltools (PyTorch → CoreML, INT8 quantization), MLX, MobileNetV2, ViTSTR OCR, Google Gemini API, Ollama / local LLMs

Tools & Delivery: Xcode, Instruments, Git, GitHub, Jira, Confluence, Agile/Scrum, Sprint Planning, Code & Design Review, Technical Roadmapping

PROFESSIONAL EXPERIENCE

Lead iOS Engineer | Neurealm

May 2021 – May 2026

Client: Avaya | Domain: Enterprise VoIP & Real-Time Communication

- Architect and deliver scalable enterprise iOS applications, translating complex business requirements into robust, maintainable Clean Architecture and MVVM solutions.
- Own architectural decisions for Avaya Workplace and Avaya Spaces SDK across VoIP (SIP/PJSIP), video conferencing, third-party SDK integration, threading, and release stability.
- Modernized the codebase with Swift Concurrency (async/await, Actors), improving application stability, responsiveness, and thread safety — contributing to the 96% → 99% crash-free improvement.
- Designed and optimized CI/CD pipelines with Atlassian Bamboo and streamlined Jira workflows for predictable, high-quality enterprise releases.
- Lead and mentor 4–5 senior/mid-level iOS engineers on architecture, code/design reviews, and delivery ownership while remaining ~50% hands-on in Swift/SwiftUI.
- Drive end-to-end Agile/Scrum execution, including direct stakeholder collaboration with Avaya — lifting feature delivery velocity by ~30–35%.

Freelance iOS Consultant | Self-Employed

Jun 2019 – Apr 2021

- Delivered independent iOS consulting projects end-to-end, from architecture through App Store submission, across retail and media domains.
- Initiated and built open-source projects — including the Smart Face Recognition Attendance System (Core ML, Vision Framework) and a Video Downloader — exploring production-quality on-device AI/ML patterns.
- Conducted hands-on R&D in Swift Concurrency, Clean Architecture, coremltools model export, and AI-assisted development tooling (GitHub Copilot, local LLMs) — directly applied in the subsequent enterprise role.

Technology Specialist – iOS Lead | Cognizant Technology Solutions

Aug 2014 – Jun 2019

Clients: Ford Motors (FordPass), AutoZone | Domain: Automotive & Retail

- Engineered a full CI/CD pipeline using CircleCI and Concourse CI for FordPass, cutting release cycles from days/weeks to minutes for a flagship automotive iOS app — a 30–70% reduction in build/deploy time.
- Designed and delivered key FordPass features — remote vehicle control, parking locator, and wallet integration — enhancing UX and functionality at enterprise scale.
- Led iOS development for the AutoZone retail application: managed product backlogs, drove Agile sprint execution, and mentored engineers on iOS APIs and architecture patterns.
- Improved code quality through pair programming and unit testing (Cedar framework), reducing production defects by ~40–50% and establishing engineering standards across teams.

Senior iOS Developer | Copper Mobile

Jun 2012 – Aug 2014

Clients: Domino's Pizza, MyLife, Walkingspree, HLC Navigator, Digital Fridge | Domain: Food-Tech, Social, Enterprise

- Delivered 3+ client iOS applications end-to-end — from architecture design through App Store submission — using Objective-C and early Swift, establishing reusable architecture patterns adopted across projects.
 - ▶ Domino's Pizza iOS — voice ordering via Nuance Communication API; Kiwi unit testing; national rollout across 5,000+ locations.
 - ▶ MyLife Chat — real-time 1:1 and group chat using XMPP/Jabber (XEP-0045), media transfer (XEP-0095/0096), Openfire server integration.

Earlier iOS / VoIP Engineering | Helm, Ascent Telecom, Adore Infotech

Jan 2008 – May 2012

Clients: Thomson Reuters, Spice Global, Talkfree Inc | Domain: Legal, Financial & VoIP

- Built Elite 3E, a law-firm management iPad app for Thomson Reuters covering financial management, KPI dashboards, custom UI, Yahoo Finance API integration, and PDF annotation on iOS 5.
- Compiled and integrated PJSIP for iOS across multiple VoIP products (Mobeefree, S-Unno, Adore SIP Client), including Blowfish encryption for SIP-blocked regions — establishing the 18-year foundation of VoIP/SIP specialization that anchors this profile.

OPEN SOURCE & KEY PROJECTS

AIAnalyzer — Swift Static Analysis CLI with AI-Powered Suggestions ★ Featured

github.com/elangbamjohnson/AIAnalyzer

- Open-source CLI using SwiftSyntax to scan Swift codebases and detect architectural violations (God Objects, Large Classes, High Method Density) with smart deduplication and a modular, configurable rule engine.
- Integrates AI-powered fix suggestions in three modes — Cloud (Google Gemini API), Local (Ollama + Qwen2.5 Coder), and Hybrid (confidence-based fallback) — demonstrating real-world cloud and on-device AI/ML engineering.
- Engineered a full GitHub Actions CI/CD pipeline with automated testing, versioned releases, and a Homebrew tap formula — enabling zero-friction installation on any macOS machine and demonstrating end-to-end DevOps ownership beyond mobile (Swift tools ecosystem).

Meitei Mayek Transliterator — On-Device OCR & NLP iOS App

github.com/elangbamjohnson/MeiteiMayekTransliterator

- SwiftUI iOS app for bidirectional Meitei Mayek script transliteration (an endangered Unicode language spoken by ~2M people), combining a trained Core ML OCR model with a rule-based NLP engine. (Core ML → Apple Vision → OCR.space)
- Exported a ViTSTR-style HuggingFace/PyTorch OCR model to Core ML (.mlpackage) via coremltools with INT8 weight compression; implemented a Swift logit decoder for on-device inference.

Smart Face Recognition Attendance System

github.com/elangbamjohnson/Smart_Attendance_System

- Real-time on-device facial recognition using Vision Framework (VNDetectFaceRectanglesRequest), Core ML, and MobileNetV2 — a 12-step pipeline from camera capture to attendance marking via cosine similarity matching, with zero cloud dependency.

EDUCATION

Master of Computer Applications (MCA) — Manipur University | Bachelor of Computer Applications (BCA) — MCRPV, Bhopal