Joseph Mattiello

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Profile

- Engineer & Hands-on Engineering Leader Mobile, Full Stack, Systems Architecture, CI/CD + DevOps/Automation. I've built web and mobile native frontends, backends, mobile applications, infrastructure, embedded/IoT systems.
- · Mobile Architect, Engineer, & Leader. Leading iOS & Android teams. High level of experience developing on both iOS & Android Platforms, native or cross-platform toolkits (ReactNative, Fuse.io).

Professional Experience

Cameo New York, NY Principal iOS Engineer October 2020 - March 2021

· First Native iOS Engineer in an existing mature ReactNative stack.

- · Add HD async compression video support, improving video quality, reducing bandwidth and AWS compression costs.
- · Added AR filter support. Improve visual quality and simplicity at request from top talent for better publishing quality.
- · Focus on performance & tight features integration.
- Reduced memory overhead, startup times, login times and network optimisation.
- Consolidated CI/CD pipelines from a mix of shell scripts/CircleCI to GitHub actions for faster 10x+ speedup in PR validation.
- Cameo Web App / App Store Link

NewsCorp Inc. New York, NY Director iOS Platform (Global HQ) April

2019 - February 2020

- · As iOS platform lead, I was one of 8 people (4 directors + 4 deputies) working in the central NewsCorp app platform team. Responsibilities included directing, managing developers that were either; NewsCorp internal, NewsCorp sub-brand internal, contractors for platform or brand apps.
- · Managed iOS developers across multiple regions working in parallel on various apps (NYC, Argentina, London, Ukraine, Russia, Hong Kong, Syndey & Bangalore)
- My team built the core foundation that all NewsCorp brands (DowJones, NYPost, The Australian, Barrons, Times UK +) use to develop their brand-specific apps. I directly managed all code in our platform SDKs, as well as cover pull requests and engineers from our internal pool that were loaned out to brands to work on their apps in coordination with developers they may hire themselves to build on our platform.
- · Our SDKs were treated as private "open source". Internal or brand developers create feature requests, pull requests, and we hold platform town halls so that brand contributions and additions to the common platform were rapidly integrated and shared across the greater NewsCorp umbrella of applications.
- Other responsibilities include the setup of CI/CD for brand apps, documenting and providing tutorials and code samples and app templates for developers using our internal platform to consume.
- · Opened and hired several senior developers for the new full-time iOS satellite team in Barcelona, in addition to restaffing/ training our existing teams in Argentina (Spark outsourced), Bangalore (NTS sub-corp) and the Ukraine/Russia (EPAM outsourced).
- · Hired, trained and led the new team for brand new brand Knewz for iOS. Knewz was a personal project, created and overseen by CEO Robert Thomson, with final sign off at launch by Chairman Rupert Murdoch. Knewz was quickly noticed by and requested to coordinate an app store promotion unprompted from Apple. 4.5+ rating during my tenure.

Salido Inc. New York, NY Lead Developer August 2018 - April 2019

- As a Lead Developer at Salido Inc, my responsibilities include managing my front end development team, coordinating with back end and other front end teams on feature development and leading architecture design on new technical business relationships / 3rd party vendor integration.
- During integrating with legacy vendors, I created the first Swift native XML-SOAP framework with full Codable support. I was also
 in charge of refactoring the original monolithic project structure into independent frameworks using separate repositories,
 streamlining coordination with our global development team utilizing integration automation tools (Circle CI, Fastlane, Carthage +
 Rome, bespoke scripts) to resolve any issues with independent teams clobbering or stalling their feature development due to a
 history of QA and merge issues resulting from the legacy single repo/workspace architecture.
- I was also active in creating development tools, documentation and templates to assist other engineers to conform to improved organization and coding standards. I introduced the team to Promises, RxSwift, MVVM-C, Clean Architecture and Objc-c to Swift Interop.

Hearst Digital News

New York, NY May 2012 – June 2018

Lead Mobile Architect / Team Lead

- Hearst Digital News Team https://www.hearst.com/newspapers
- As the lead developer, my responsibilities include; code submission review, peer training, ticket delegation, build submission and
 release schedule in conjunction with a project manager. I manage a team of several dedicated mobile developers with occasional
 cross-development with our web and back end teams.
- Over the course of a year, we had several update releases and have maintained a 4+ star rating in the App Store. While releasing new features, I took the initiative to convert the codebase to Objective-C 2.0 and ARC and had seen an 80+% reduction in crash reports per capita and a 30% reduction in memory footprint. I also did significant refactoring of our shared code base used across our four apps and separated it into a tiered build system of shared base and UI libraries, paving the way for future apps on both mobile and desktop and allowing us to share code with other development teams at Hearst where there previously was not concise code clarity and separability.
- Starting in Summer 2015 through my departure, I built a completely ground-up new app in a blend of Swift 2.0, Obj-C with a full
 CoreData persistence back end and CoreText, storyboard with size classes front end. The app is universal support iPhones and
 iPads running iOS 8+. We supported Apple Watch, Today Screen, Force Touch extensions as well. I maintained a role as both
 lead architect and developer with support from two freelance developers from an outsourcing firm. Example from one of our
 smallest markets, San Antonio. App Store Link

Sooloos (Roonlabs)

New York, NY

May

Software Engineer (iOS/macOS) 2010 – April 2012

- Sooloos is now Roon Labs https://roonlabs.com
- Project 1 To link the existing audio decoders and playback functionality in C#/Mono to native Core Audio code. This was resulting in significant contributions to the Novel MonoMac project for several missing Cocoa frameworks.
- Project 2 Developing the native event and UI code for OS X. Meridian is currently developing a cross-platform C#/ OpenGL based desktop application. My duties included native font rendering, window and menu management, mouse and keyboard events, native text entry and processing forking and out of process tasks. Various MonoMac patches were also developed.
 Intimate knowledge of the NSApplication runloop process, event handling, and OpenGL compositing systems was also required.
- Project 3 Developing an iOS app with the purpose of two-way syncing and playback of a users Sooloos media library. This
 required interfacing and expanding with an existing cross-platform C toolkit for synchronized network communications and
 database management with the desktop client. The project was written native in Objective-C. I was the sole coder and UI
 designer for this app. This project was completed but released delayed by other platform timelines.
- Project 4 Overhaul of our iPad remote control software, Core Control (formally called Sooloos). The original project was coded in LUA using iPhone wax. It relied heavily on network communications between the host and remote iOS systems. The project required extensive UI modifications and the addition of many new UI layouts and a host of new functionality, and expanding our network protocol. Most newly written code was in LUA, with some performance-critical sections completed in Objective-C & C.
 The application was released to overwhelmingly positive reviews and was rated at over 4.5 stars. Original App Link / Remake

- My initial duties were to design and create Citysense® for the iPhone. In doing so, I was also named on several patents for my involvement in improving the backend data analysis systems. Citysense was a unique application for iPhone that started development prior to the release of the official Apple SDK. I was hired for my knowledge in API hack-ing and was in charge of the full codebase and design. Citysense has been featured on GigaOM & NY Times.
- Following *Citysense*, I took on an additional role of network and security engineer. I was in charge of creating a sound office and co-location environment, which included the setup of our office intranet, firewalls, VPN with our colo, file and printer sharing, and OS X Collaboration services, including iCal, Address Book and WIKI servers. I was also in charge of building, testing, and deploying our Hadoop systems for our analytics platforms.
- As a software engineer, I also created various utilities for managing and exploring our large datasets and also authored large
 patches for the GNUstep tool PBXBuild that converts Apple XCode projects into GNUstep Makefile projects and am an official
 FSF/GNU project developer.
- My final project at Sense Networks was <u>CabSense</u> for the iPhone, where I was both a developer and a contributing de- signer in conjunction with our Android team. I contributed substantial pre-rendered assets along with writing the 'Radar' view in Quartz. I also spearheaded the effort to ensure security and authenticity in server/client communications when dealing with client input and tracking. Security, integrity, consistency, reliability and performance were my main objectives throughout the project. Along with the application, I created reusable libraries for third parties to interact with our CabSense data on other C and Cocoa platforms. CabSense has since been featured on <u>VentureBeat</u>, <u>ZDNet</u>, <u>NY Times</u>.

Previous Experience

People Security – Security Consultant (Contract) AT&T Tech Channel – Associate Producer Oct 2007 – Dec 2007 Aug 2007 – Nov 2007

Personal Projects / Freelance

<u>Hero Transitions</u> - New Maintainer <u>https://github.com/HeroTransitions/Hero</u>

Provenance - tvOS & iOS multi-platform emulator. Co-author and PM. https://provenance-emu.com

RxReachability - New Maintainer https://github.com/RxSwiftCommunity/RxReachability/

Bass Station 2 for Max/MSP - https://github.com/JoeMatt/BassStationIIMaxForLive

<u>iPhreak</u> - Native DTMF generator for the Apple iPhone <u>http://iphreak.googlecode.com</u> (Objective-C/GPL) Pre-official iPhone SDK as part of the initial iPhone software hacking effort

Question of the Day - iPhone app. Contracted to add features to existing app. iTunes Link

MixMan DM2 USB/MIDI driver for OS X (unofficial, reverse engineered protocol) Home, MacUpdate Reviews (C and C++ mix for driver. Obj-C and Quartz Composer for front-end)

OS X driver for Starr Labs USB Guitar Product page (Objective-C & C)

OS X driver for Aurora Mixer - Google Code project (Objective-C & C)

Pbxbuild - Major patches submitted to allow the conversion of complex, multi-platform X Code project files to Linux & Windows compatible GNU Make files for single run triple platform compilations. Details

Other Open source project contributions (partial):

XMLCoder, Reicast, RxAlamoFire, sReto, PokeMini, GLideN64, ReactNative, MMDrawerController, Mono, UIForLumberjack, EGYWebViewController

Experimental prototypes in:

Blockchain, Arduino / Embedded ARM, ESP32, LoRa, Bluetooth LE, WiFi IoT mesh networks

Education

University at Buffalo

BS, Computer Science

2004 - 2008