

# Michael Wells

**Experienced contract developer of iOS apps in Swift**

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I love creating awesome iOS apps that are beautiful, functional, and even magical. And not just on the outside — *awesome* also means the code is modern, efficient, easy to understand, and a snap to maintain and extend.

**I create iOS apps in Swift almost every day. My goal is to keep doing that.**

## iOS Experience

I've been creating iOS apps for nine years, starting in Objective-C and moving to Swift shortly after. While proficient in Objective-C, it isn't a language I've used day-to-day for a while. I've written code using system frameworks such as CoreData, software integration frameworks such as Stripe, and device integration frameworks such as the Zebra scanner SDK.

I'm not a backend developer, but I've done minor work in that area. I can converse about database design, create database tables, and write intermediate SQL queries. I've created some small web apps and modified the backend to vend REST APIs.

### **Independent Contractor, Wells Consulting (2016–Present)**

Created warehouse management and custom retail point-of-sale checkout apps. Both tightly integrate with the client's existing business processes. I am the sole developer on both apps, but worked closely with a small team of web and backend engineers. I also write, test, and deploy enhancements as requested. During non-billable time, I'm reviewing SwiftUI to determine if it can replace UIKit for upcoming features.

**KEYWORDS: SWIFT, SCALA, COREDATA, APNS, INTERNATIONALIZATION, POSTGRESQL, CI, MDM**

### **Technical Lead, 3D Systems (2013–2016)**

Created an iOS app that controlled a 3D scanner to make custom-fit, 3D-printed wrist braces. I was the sole developer, but worked closely with computational developers and orthopedic doctors.

**KEYWORDS: OBJECTIVE-C, COREGRAPHICS, OPENGL**

# Historical Experience

I have 30 years of experience creating apps across a range of industries, company sizes, and individual responsibilities. I've worked in 2D/3D graphics, video security, healthcare, logistics, and retail. I've worked at start-ups and large organizations. I've worked as a sole developer, team member, manager, and an independent contractor.

## **Technical Lead, 3D Systems (Other Development)**

Wrote a web application that controlled a photogrammetric scanner that captured facial features for 3D printed figurines. Designed software to automate building surgical Le Fort guides and plates.

**KEYWORDS: HTML, JAVASCRIPT, C#, WPF**

## **Director of Engineering, 3VR (2005–2013)**

Managed the VisionPoint and CrimeDex core development teams (15 developers) and shipped seven major versions of the platform to global, Fortune 1000 companies. I was the number one committer to source code including event card panel, video playback, search predicate generation, and basic business controls. I also helped create a novel object-relational mapping (ORM) system.

**KEYWORDS: C#, WINFORMS, INTERNATIONALIZATION**

## **Senior Software Engineer, Black Pearl (2004)**

Wrote B4 Designer application-wide cut-copy-paste, icon management, log management, and role-based access.

**KEYWORDS: C#, WINFORMS**

## **Founder, RTzen (2001–2004)**

Co-founded the company and helped manage its infrastructure, growth, and technical focus. Designed the system framework that included transactional storage, infinite undo, wire graph evaluation, scripting, licensing, multi-threaded jobs, wire graph editor, and a custom property editor. Wrote RT/shader that enabled artists to express complex HLSL shader code with a simple drag-and-drop, visual UI.

**KEYWORDS: C#, WINFORMS, 3D GRAPHICS**

## **Technical Lead, Autodesk (1998–2001)**

Organized and lead the team responsible for specializing 3DS Max for the architectural, game level editing, and web publishing markets. I also created and helped to patent the i-drop family of features.

**KEYWORDS: C++, 3D GRAPHICS**

## **Software Engineer, PTC (1995–1998)**

Ported structural analysis (Pro/MECHANICA), heat tolerance analysis (Pro/THERMAL), motion analysis (Pro/MOTION), and architectural modeling (Pro/REFLEX) apps to Windows. I also worked on common foundational layers such as internationalization, printing, user interface, and IPC.

**KEYWORDS: C++, 3D GRAPHICS, INTERNATIONALIZATION**

## **Software Engineer, SL (1993–1995)**

Ported 2D graphics SDK (SL-GMS) to Windows.

**KEYWORDS: C, 2D GRAPHICS, INTERNATIONALIZATION**

# Supplemental Information

## **Patents**

Some of my work has led to patents. In these cases I worked closely with patent lawyers and other co-inventors. Note in US7019743 the inventor is listed as Michael Pittman aka Michael Wells.

Specifying search criteria for searching video data ([US8553084](#))

Monitoring and presenting video surveillance data ([US7843491](#))

Performing operations using drag and drop features ([US7019743](#))

## **Degrees**

Master of Science in Computer Engineering,

Bachelor of Science in Mathematics and Computer Science