



Michael Welles

Overview

Years of experience leading teams on projects from conception to completion.

Recent focus primarily on mobile and emerging/embedded technologies.

Deep experience with digital media of all formats – images, audio, and video. At the both the micro and macro levels. Delving into both the media container/codec/format internals, as well as the creation of highly available and scalable platforms for digestion, management, transformation, distribution and consumption.

Long experience with building highly available web applications and infrastructures.

Work Experience

2015 - **Director of Mobile**, *Huge*, Brooklyn, NY.

Present Technical director, focusing on mobile and emerging technologies. Headed 25 person cross-functional team of iOS, Android, and backend engineers – as well as QA analysts, designers and product managers. Notable client work : Leading the design, firmware and application development teams for a 'smart' bluetooth audio accessory. Developing a companion application for a AAA game publisher that allowed players to scan their own likeness to be rendered as their in game avatar.

2013 - 2014 **Principal Architect**, *Huge*, Brooklyn, NY.

Technical director, focusing on mobile and emerging technologies. Instituted and evangelized agile best practices, continuous integration, continuous delivery. Sponsored new technology investigations and initiatives (interior wayfinding / beacons, leap motion, arduino and embedded system prototypes. Sponsored internal outreach initiatives (meetups, open source efforts, etc.). Led cross functional teams on project work.

2011 - 2013 **Manager of Mobile Technology**, *Consumer Reports*, Yonkers, NY.

Founded mobile applications and new media group. Built in house team responsible for mobile applications development. Responsibilities included overall mobile product strategies as well as technical execution. Launched flagship ratings application built by new internal team. Managed external vendors in the maintenance of a portfolio of legacy applications.

- 2008 - 2011 **Senior Software Engineer - iTunes Store Video Workflow Group**, *Apple, Inc.*, Cupertino, CA.
 Senior engineer on a team of five responsible for the encoding and assembly of all iTunes video media. Responsible for the encoding toolchain used by the processing cluster. Responsible for the specification of formats of deliverable media, the test suites to validate the formats, and the creation of reference media for use by hardware teams in compliance testing. Responsible for the continuous improvement of the visual and audio quality of Store media. Heavily involved in day-to-day operations and business production as well as engineering. Led two two major rewrites of the application, the first for the launch of the HDTV product, and the second for the launch of international video and television
- 2007 - 2008 **Senior Software Architect**, *The New York Times*, New York, NY.
 Led effort to incorporate continuous integration into the development and release processes of NY Times.com. Created and evangelized tools, procedures and processes for the testing and packaging of software through the chain of production. Authored tools to help with process automation. Supervised overall architectural design and implementation of effort to develop new a new content management system for news.
- 2006 - 2007 **Founder, Senior Parter**, *Bangstate Inc*, New York, NY.
 Resumed role as senior partner, concentrating on web application using Ruby on Rails and other open source technologies. Strong focus on best practices, test driven development, short milestones, iterative development, close client interaction. Also served as acting CTO, led five person development and design team for haystack.com, a social networking site focused on music discovery, full album streaming content
- 2004 - 2006 **Systems Architect / Lead Developer**, *The Associated Press*, New York, NY.
 Design, architecture of highly trafficked and dynamic systems for the distribution, digestion, and display of multimedia news content. Led team of seven developers, QA staff and system engineers. Notable project was the development of AP Hosted Elections, the system that gathered, processed and presented the realtime results for the 2004 US presidential elections. Used as the primary source for election returns for most major news organizations worldwide.
- 1998 - 2004 **Founder, Senior Partner**, *Bangstate Inc.*, New York, NY.
 Founded and managed a consultancy of five principal partners, and ten additional developers, designers, and administrators. Responsible for the business as a whole as well as delivering individual projects. Clients included organizations such as The Associated Press, The American Bar Association, Atlantic Records, Forbes Magazine, CIR/SEIU, Time, Inc. Notable projects include: TNEWS, the internet distribution platform of the Associated Press that used standards based protocols (NNTP, IPTC NITF XML) to distribute content that had previously only been available in a propriety formats over satellite. Adding IPTC Newsphoto extension support to ImageMagik and libtiff. Handheld applications for use by Military Family Research Institute at Perdue University, as well as the handheld client and server backend for real-estate agents to get mobile access to listings data.
- 1996 - 1997 **Member, Technical Staff**, *SOS Corp*, New York, NY.
- 1995 - 1996 **System Administrator - Distributed Resources Management**, *PaineWebber Inc*, New York, NY.
- 1995 **Consultant/Programmer**, *onShore, Inc.*, Chicago, IL.
- 1994 **Jr. Programmer/Analyst**, *The Social Science and Public Policy Computing Center at the University of Chicago*, Chicago, IL.

Education

- 1990 - 1994 **Bachelor of Arts in History**, *The University of Chicago*, Chicago, IL.

201 Eastern Parkway Apt. 3E – Brooklyn, NY 11238

☎ 917-586-9218 • ✉ mlwelles@gmail.com

2/3

Skills

Languages	Swift, Objective-C, C, C++, Javascript, Ruby, Java, C#, Python, Lua, Lisp
Frameworks	iOS, Android, Cocoa, Rails, QuickTime, WebKit, Node, Hibernate, Spring, Struts, Rails, Java, MQ Series, pthreads, etc... etc...
Systems	Experience with almost every flavor of Unix, deep knowledge of Linux / BSD/ OSX / Unix internals.
Media	QuickTime, H.264, MPEG-4, MPEG-2, JPEG, TIFF, MP3, WAV, AIFF, etc..

OSS Software

OSS Contributions not otherwise noted in work history

- Author, BeaconScanner. <http://www.hugeinc.com/ideas/perspective/an-ibeacon-scanning-utility-for-osx> (2014)
- Maintainer of libtiff. <http://www.libtiff.org/> (1999-2001)
- Contributor to the Debian bootfloppy project.
- Author of the changedfiles system, a (now obsoleted) combination of a kernel module and a user space client that provided real time notification of filesystem modifications and hooks for arbitrary actions to be taken in response. Included inline support for triggering filesystem replication by FTP as well as mysql database import.

Addendum

2000 - 2009 **Founder**, *McCaig-Welles Gallery*, Brooklyn, NY.

Founder and co-owner, with spouse, of McCaig-Welles Gallery, a fine arts gallery in Brooklyn NY that exhibited hundreds of artists nationally and internationally. The gallery was featured in many publications, among them The New York Times, Artforum, The Economist's "A More Intelligent Life", The Village Voice, New York Press, TimeOut New York, and Artforum.

1998 **Expert Witness**, *The American Civil Liberties Union*, New York, NY.

Expert witness for the ACLU on the efficacy of content filtering software in their lawsuit against the Loudoun County, VA library system.