Daniel D Grassi	Software Developer/Architect	Resume
Dan@Zaph.com	1108 Tangelo Isle · Fort Lauderdale · Florida · 33315	954-465-8166

Experience Summary

Software Engineering:	Apple MacOS Cocoa, Objective-C/C/C++, XCode	14 years
	Apple iOS (iPhone/iPad) and CocoaTouch	7 years
	MySQL, SQLite, Python, XML, HTML, CGI, Assembly, Shell, YACC, Fortran	20 years
	ATT Unix, Linux, OS X Darwin, Mac OS (legacy)	
Professional Interests:	Refactoring, UML and Design Patterns	
Conferences:	Apple WWDC (World Wide Developer Conference) 2003 through 2013	11 years
Development Areas:	Mass market consumer applications	12 years
	Project architecture	20+ years
	Kernel I/O device drivers, userland device drivers	20+ years
	Database design	15 years
	Cryptographic design and security risk assessment	5 years

Zaph, LLC. — Position: 2008 – present — Owner

Highlights :	Development of several iPhone apps currently in the Apple App Store
Selected iPhone Applications :	Hurricanes: Tracking and current storm information aggregation Lap Speed: Calculates speed per lap given a track length. Crazy Sage: Creates crazy proverbs by randomly mixing two proverbs together. CardKing: Provides loyalty card scanning and access on an iPhone. Citrix Receiver: provides the same functionality as the PC/MAC version. Scoptec: A cognitive development educational program aimed at pre-school children.
Citrix Inc.	Member of the Cloud.com team Development of resumable file transfer, code injection into an Apple application to provide additonal features.
JM Family	Development of several inhouse iOS applications including a twitter-like app and auto action evaluation application.
Marware Inc.	Development of ProjectX, a project management application, Cocoa with CoreData
Platforms, Technologies and Tools	iPhone API, Cocoa API, Mac OS X, Objective-C, Xcode,.

Lexar Media, Inc. — Permanent Position: 2002-2007 - 5-1/2 years — Senior Software Architect

Commercial Products:

SafePSD S1100: Enterprise level secure removable flash storage through access control and hardware on device encryption. Implemented OS X access API and libraries, user application and auto-launch daemon.

Image Rescue 1, 2 & 3: Application for Apple Macintosh that recovers images from damaged or erased flash cards. Responsible for the design of recovery algorithms, plug-in extensibility for image formats and code implementation.

MSC Lock: A new USB lockable storage specification. Technical contributor to the specification.

Active Memory: Method to provide meta information that is persistent across complete flash memory card data erasure..

LockTight: Secure flash memory card, camera and reader system. Architect of the security architecture covering the camera, memory card, card reader user and administration applications. Implemented the OS X applications

SafeGuard 1 & 2: Secure removable flash drive security through access controls or data encryption.

Device Drivers: Kernel based SCSI vendor specific command I/O device driver, kernel based AES encryption driver, userland USB vendor specific command device driver - PowerPC & Intel

In House: Created a fully automated one click build system from compile to installer. Developed a bug tracking system, developed a prototype file archive and retrieval system. Developed a Python program to convert Flash memory card firmware assembly code from 8085 to 186.

Platforms, Technologies and Tools: Mac OS X 10.1-5, Xcode C/Objective-C, Interface Builder, Cocoa API/Framework, user-land and kernel I/O device drivers, cryptography, installer and build system.

IBM

Contract Position: 2001 - 9 months — **Senior Software Engineer**

Highlights: **ViaVoice** voice recognition. Member of the team that created the OS X implementation, MacWorld 2001 Best of Show winner.

Platforms, Technologies and Tools: Mac OS X 10.0-1, Project Builder C/Objective-C, Interface Builder, Cocoa API/Framework, installer and build system.

Medifacts at FDA

Position: 1994-2000 - 5-1/2 years — **Senior Software Engineer**

Highlights: ABPM CRADA: Project at the Cardio Renal Division of the FDA to study ABPM capabilities. Involvement included database design and creation as well as custom analysis and visualization applications. Interactive program to view experimental data, real-time high-speed data acquisition

Platforms, Technologies and Tools: Mac OS 7, Metrowerks CodeWarrior C++, MPW, Classic Mac Toolbox API.

CSX Technology

Contract Position: 1992-1994 - 2 years — **Senior Software Engineer**

Highlights:	
Platforms, Technologies and Tools:	Design and development of several customer service applications for railroad operations. Macintosh, MPW, SQL, C++, Object Pascal, screen scraping, CICS sessions.

Applied Computer Sciences

Position: 1988-1992 - 4 years

Senior Software Engineer

Highlights:	
	Bethlehem Steel Corporation: FORTRAN subroutine package to interface a MODCOMP minicomputer with Rosemont MVCU/II PIO hardware. **SIDOR**: Distributed network of 11 MODCOMP super-minicomputers controlling Basic Oxygen Furnaces and Dual Slab Casters. **Gulf States Steel**: Continuous caster supervisory control system and solidification and chemistry quality models. **Modular Computer Systems**: TCP/IP group Leader, development of embedded Telnet server, async communications unix device driver, member of Real-Time unix TCP/IP attached processor port.
Platforms, Technologies and Tools:	**MODCOMP computer systems, assembly, FORTRAN, AWK, unix, TCP/IP.**

Modular Computer Systems

Position: 1984-1988 - 3 years

Member Technical Staff

Highlights:	Ported the MAX IV file manager to MAX32, designed and implemented a superset of the MAX32 file manager for a unix meta port, designed a file manager management caching scheme for MAX32, analysis of file manager performance. Design and implementation of enhancements to the file manager user interface, design of the file manager data chaining implementation. Definition of the user interface requirements between realix (MODCOMP's unix) and the underlying MODCOMP MAX32 operating system. Design and implementation of the operating system symbolic debugger.
Platforms, Technologies and Tools:	MaxIV, Max32, unix file manager architecture, Assembly, XPL

Organizer for CocoaHeads and Cocoa Developers group in Fort Lauderdale CocoaHeads

Presentations Given:

Cryptography in iOS and OSX
Grand Central Dispatch
Cocoa Blocks
Coding "Best Practices" for developing code
Regular expressions including there use in iOS 4
Computer memory, allocation, usage and pitfalls
OSX and iOS reference count memory management
Unit Tests with Xcode 4.x
OCMock in Unit Test with Xcode 4.x

Xcode 4.2 and the features it brings including better refactoring and ARC
Git, Xcode 4.2 integration and remote repositories
CGPath, UIBezierPath and transforms
Finding mathematical solutions by numeric algorithm
TDD demonstrations of the Stack, Roman Numeral and Bowling Katas
Public key cryptography: Diffie-Hellman, RSA, Certificates, PKI
User Interface Design
UX — Designed by Raccoons
Sniffing The Wire – Network Analyzers
AF477 — UX and Errors
Developers — Professional or Artist
Git — Getting Started & Using
Understanding Retain Count in Objective-C
TDD – Test Driven Development

Education and Research

North Carolina State	Electrical Engineering
University of Pennsylvania	Computer Science, graduate courses in OS internals and language design.
Marine Biological Laboratory	Research Assistant, 1988 - 1999

Recent Conferences Attended

NSConference	Reading/Leicester, England, 2011 - 2014
mdevcon	Amsterdam, Netherlands, 2012 - 2014
ConveyUX	Seattle, February 2014
CocoaConf	Boston, October 2013
ACM MobileHCI	Munich, Germany, August 2013
WWDC	San Francisco 2003 - 2013
NSConference	Reading/Leicester, England, 2011 - 2013
CocoaConf	Washington DC, 2012
ACM Turing Awards	San Francisco, 2012
Voices That Matter	Philadelphia, 2010
360 MacDev	Denver, December 2010
CocoaConf	Columbus, 2010
Mac Tech	Los Angeles, 2010