

OBJECTIVE:

Full time or contract Lead, Computer Scientist or Senior Engineer focusing in user-friendly application design & development on Apple Macintosh, iOS (iPhone, iPad, etc.) or UNIX OS based machines.

An ideal position would involve creating and learning new, emerging technologies while using my extensive experience in diverse environments to build useful tools, apps and code for use by developers and customers.

SKILLS:

- 20+ years designing and coding applications, daemons & kernel extensions for macOS, iOS, watchOS and tvOS.
- Works primarily in Swift & Objective C (Cocoa) & C++ (CoreFoundation); also in SwiftUI, C, Java, JavaScript, SQL.
- Built code under Xcode (release & beta), LLVM, GNU G++ & GCC, IntelliJ & JBuilder among others.
- Authored and worked in many Object Oriented function classes which cross-compile and build for multiple architectures at the same time (e.g. Macintosh, Microsoft Windows and UNIX & Linux operating systems).
- Debugging abilities: uses source level or low level tools (LLDB) to diagnose problems & optimize performance.
- Adaptable & cross functional: follows Agile practices, daily Scrums and updated Kanban boards in JIRA.
- Forward thinking: repos always archived via Git (GitHub, GitLab, BitBucket, etc.), Subversion and other version control setups. Knowledge of CI (Travis, CircleCI, Fastlane & Jenkins) & many UNIX sysadmin techniques.
- Exceptionally friendly and personable: not hesitant to deal with customers, enjoys taking on leadership roles.
- Flexible: comfortable working solo, as part of a large group, but especially smaller (4-5 person) close-knit teams.

EXPERIENCE:

CONTRACT & INDEPENDENT APPLE CONSULTANT San Francisco, Palo Alto, Detroit, Philadelphia, Vancouver
Senior & Lead Engineer, macOS (Macintosh) & iOS (iPhone & iPad) January, 2003 to Present

Worked solo or as part of a team (sometimes as lead) on a number of diverse projects & shrink-wrapped applications:

- As a reliable & long term contract senior engineer, I've integrated well across on-site and distributed teams to author new features, update and fix bugs in a wide variety of extremely popular, large e-commerce & consumer apps such as Weight Watchers, Adobe's Flash plugin and more. Recent roles include:
 - **BleacherReport** (November 2018 - 2020) ; primarily focused on engaging social features (e.g. sharing articles & invites, adding/viewing comments on sports tracks, accessibility) in this 221M user app, reviewing and suggesting improvements to other developers' pull requests, also implemented fixes across the entire iOS app: 100+ PR's were merged by me across my two+ years at BR & WarnerMedia.
 - **Line2** (November 2017 - April 2019); added modern Swift UI and classes to a legacy Objective-C based VoIP call center app
 - **Climate Corporation** (March 2016 - November 2016); working with distributed teams from Sao Paulo, Seattle & St. Louis, added i18n (internationalization & unit conversion) utilities across shared libraries & Cocoapods to allow their FieldVision apps to be sold worldwide, outside of the U.S. app store; used Fastlane & Jenkins for automated builds
 - **StubHub** (Feb 2015 - August 2015); enabled highly targeted & customized push notifications for user engagement
 - **Dominos Pizza** (September 2013 - May 2014); assembled first iPad version of their pizza ordering app, created custom animations for ordering and profiles for e-commerce; first experience with Jenkins CI and GitHub project management
- On my own or with my own team, I've shipped over two dozen original iOS applications to the Apple App Store over the past ten years, all commissioned works for different large corporations, small businesses & entrepreneurs.
- Technologies used & intimately familiar with include: WebKit, IOKit, Cocoapods, SwiftPackageManager, Combine, pthreads, Cocoa Foundation, XML, JSON, Kerberos Authentication, SSL & OpenSSL, Core Graphics (Quartz 2D), Core Foundation, MapKit, shell & Perl scripts, QT, JSON, XML, REST-ful APIs.
- Made immediate, positive impacts at all contract assignments: for example, while contracting on Adobe's Flash Player team, over 150 bugs, enhancement requests & new features were addressed and resolved.
- Can easily work high level (UI & front end) or low level (OS & kernel layer); for macOS, as an example, I built network kernel extensions (a.k.a. drivers, which would today be considered agents) to extend OS functionality to encrypt TCP/IP traffic within a LAN, while another kext made presented a USB device as an Ethernet interface.

SERVADOR, INC./WEBPRINT, INC.

Principal Engineer, Macintosh

New York City, New York
August, 2001 to June, 2002

- Created & customized Macintosh driver software that enables printing files to local copy shops & print franchises.
- Built Apple installer extensions that allowed personalization based on selections made on a UNIX web server.
- Assisted with Java and JavaScript elements (both authoring and QA'ing) on production web servers.

ADOBE SYSTEMS, INC.

Acrobat (Application) Engineer

San Jose, California
March, 1997 to March, 2000

- Designed features and UI (User Interface) introduced in Adobe Acrobat 4.0, 4.05 and 5.0 and its associated plug-ins.
- Most new function classes and multi-layered code is written in C++ , the remainder in C.
- Majority of engineering effort focused on the Mac versions; but most code was required to cross compile and run under Windows and UNIX architectures.
- Structured code to make creating International (localized & translated) applications easy between architectures.
- Recruited and mentored new engineers.
- Created new plug-in, Acrobat SendMail
- Solo resurrection & updating of an Adobe product (Acrobat Catalog) not successfully built in over two years.
- Fixed, enhanced and shipped a second orphaned package (Adobe Registration Utility), adding code and UI for it to display and register customers speaking 14 languages.
- Fixed dozens of problems found by QA testers introduced with the integration of new technology (OpenType, new PDF core libraries, etc.) into legacy code. Acrobat 5.0 successfully built under Carbon and MacOS X.

APPLE COMPUTER, INC.

System Software (OS) Engineer

Cupertino, California
November, 1995 to March, 1997

- Primary responsibility on OS Update team was coding and integrating releases and fixes from teams across Apple into System Software releases each month. Promoted from a graduate internship to full time, worked through four development cycles (from MacOS 7.5.3 up to 7.6.1).
- Isolated, debugged and fixed hundreds of "issues" (i.e. bugs) reported by QA, beta testers and customers; some bugs were very involved, others required working closely across software and hardware teams
- Designed and coded new features and API's into InterfaceLib and PrivateInterfaceLib, as well as the MacOS Toolbox and ROM. Coding was done in C++ , C; also Pascal and 68K Assembly.
- Corresponded and dealt directly with customers and participants on mailing lists and newsgroups to evangelize Apple and find concerns for the OS Update team to look at in the future.

NORTHERN TELECOM

Engineer/Programmer

Raleigh, North Carolina
July, 1993 to May, 1994

Developed applications for Macintosh (using tools such as Think C 6.0) and Unix (in C under a SQL/Oracle environment) for the creation of a Quality Control database. Other projects included coding intensive algorithms for calculating manufacturing performance and analysis of trends.

U-M ITS CENTER FOR INFORMATION TECHNOLOGY INTEGRATION

Programmer II, Performance and Testing Group

Ann Arbor, Michigan
March, 1991 to July, 1993

Created tools and utilities for U-M's Workstation Group, including a disk/file server benchmarking application and an extended systems permission accessory for the AFS distributed file system. Experience in MacTCP, Toolbox, extended AFP commands, and Kerberos authentication was extensively utilized. Knowledge covering other platforms running various Unix flavors were also

necessary. The emphasis of this work was in extending scripting tools to allow performance testing, as well as creating utilities to make student & staff migration to new technology less stressful.

U-M DEPARTMENT OF ELECTRICAL ENGINEERING & COMPUTER SCIENCE

Ann Arbor, Michigan

Instructional Aide
September, 1991 to April, 1993

Taught the Computer Science department's Introduction to Computer Systems course. Instruction included building Microsoft Excel spreadsheets, electronic mail and conferencing, word processing, and an introduction to Pascal programming.

EDUCATION:

STANFORD UNIVERSITY

Palo Alto, California

Continued work for Masters in Computer Science by finishing graduate courses and seminars including Advanced Operating Systems, Compilers, Distributed Systems, Computer Graphics, and Fundamentals of Programming Languages.

WAYNE STATE UNIVERSITY

Detroit, Michigan

Graduated: Master of Arts in Computer Science

Graduate level courses taken include Design & Analysis of Algorithms, Advanced Software Engineering, Database Management Systems (making use of Oracle 8.0.1 tools), Networks and Software Environments.

UNIVERSITY OF MICHIGAN

Ann Arbor, Michigan

Graduated: Bachelor of Science with major in Computer Science & Chemistry

Most Computer Science classes include rigorous programming exercises and labs. Thorough knowledge of C, C++ , Pascal, FORTRAN and the UNIX Operating System was imperative. UNIX machines worked with include IBM RTs and RS6000's running AIX 3.1 & 3.2, DEC 3100 & 5000 running Ultrix 4.1.3, Sun 3 and 4's as well as Sparcstations, among others.

PUBLICATIONS:

- *Ubiquitous Mirrors: Turning Clients into Servers*; a Distributed Systems paper presented at MacHack, June 21-23, 2001. Paper and source code available via <http://www.cs.wayne.edu/~myke/research>
- contributed to *CSE @ 50: Computing at the University of Michigan* available at https://www.eecs.umich.edu/cse/publications/Publications/CSE_Booklet.pdf

CONFERENCES:

- World Wide Developers Conference, San Francisco, CA covering technology updates from Apple Computer; May, 1998, 1999, 2000; June, 2003, 2010, 2011, 2013, 2014, 2020, etc.
- Advanced Developers Hands On Conference (ADHOC), also known as the MacHack Technical Conference, Dearborn, MI bringing together 300-400 of the most talented, hardcore Mac developers; June 1990-1994, 1998-2005

To conserve space, a number of older or semi-relevant positions aren't mentioned here. I would be happy to provide more information, or a list of references, upon request.