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| **KEN MUEHRING** | Email:KMuehring@gmail.com | APDV.png (336403 bytes) | Mcsd.gif (3972 bytes) |
| Walnut Creek, CA  94596 | Word resume: [Resume.doc](http://muehring.com/Resume.doc) |
|  USA |   |

Software Developer and Home Builder

**Education and Certification**

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| M.S. | Computer Science, University of California at Berkeley |
| M.S. cert | Bioinformatics, California State University at Hayward |
| B.A. | Computer Science, University of California at Berkeley |
| B.A. | Applied Mathematics, University of California at Berkeley |
| MCSD | Software Development, Microsoft Certified Solution Developer |

**Skills**

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| Languages: | (strong)(familiar) | Swift, Objective-C, C++, C, Visual Basic, Fortran, Assembly (various), SQLPython, C#, .Net, Perl, R, VBA, HTML, Ruby, Javascript |
| Tools: | (strong)(strong) | Xcode, iOS, VC++ 6.0, VS10, MFC, VB 6.0, Windows, Windows Server, DirectX, Com, DComTcp/Ip, Isapi, Access, Winsock, ActiveX, FrontPage |
|   | (familiar) |  Gtk+, Qt, Qdevelop,Oracle, MySql, SQL Server, Ubuntu Linux, Rogue Wave Grid Tool |

**Summary of Experience**

Mr. Muehring has more than 50 years of software systems, hardware systems, user applications, embedded systems, machine controlware, digital communications, and DSP product development experience. He has produced more than 880,000 lines of code in assembly and various higher level languages.  He has managed software and computer system research, development, operations, and maintenance for major projects for the utility industry, defense industry, computer industry, and federal and foreign governments. He holds copyrights for proprietary voice print technology used in commercial access control applications and home arrest applications. He is a Certified Microsoft Solution Developer with specialist certification in Visual C++ with MFC and Visual Basic.  He completed a certificate program in Bioinformatics at CSU Hayward in 2004.  He started writing iOS apps in 2012 and released his first in November and his second in March, 2013.  Many more were subsequently developed, with four added to the app store in 2014 and updated from 2015 to present. When not writing software, Mr. Muehring also designs and builds single family houses.

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| 2015 - Present | Contract Application Software Developer and Consultant, Frameware Corporation. |
| 2013 - 2014 | Mobile App Developer, CashBet.com |
| 2012 - 2014 | Contract Application Software Developer and Consultant, Frameware Corporation |
| 2011 - 2012 | Contract Application Software Developer and Consultant, ABS Consulting / EQECAT |
| 1997 - 2011 | Contract Application Software Developer and Consultant, Frameware Corporation |
| 1983 - 1997 | Contract Application Software Developer and Consultant, Appropriate Technology Corporation |

**Projects - 2015 to Present with Frameware Corporation**

* **October 2021 -** Developed architectural, grading, structural, and detailed designs for a multi-story manufactured house on a sloped lot in Martinez, CA.
* **August 2021** - Updated iOS app [GetList](https://itunes.apple.com/us/app/get-list/id895998755?mt=8) in App Store. The new app was rewritten using Swift 5 and iCloud.  It employs the shared database capabilities of CloudKit and automatically shares users private database records between users that explicitly request shared access.
* **June 2018**- Released iOS demo app [Say, Cheese](https://itunes.apple.com/us/app/say-cheese/id1397622908?ls=1&mt=8) in Swift, showing implementations of Speech Recognition, Microphone and Camera access, and Photos Library access, by snapping photos when the word "cheese" is said
* **February 2017**- Released iOS financial app [PortVal](https://itunes.apple.com/cz/app/portval/id1205074225?mt=8) in Swift, to provide ticker portfolio real time values and totals
* **December 2016** - Rewrote [Art Gallery 311](https://itunes.apple.com/us/app/art-gallery-311/id577356332?mt=8) app in Swift, to provide pinchable access to gallery images
* **April 2016 -**Updated iOS app [Auditor](http://muehring.com/QL.jpg) for [QualityLockout.com](http://qualitylockout.com/).

**Major Projects - 2013 to 2014 with CashBet.com**

* **November 2013 - 2014: Mobile Gaming Technologies, Inc.,**Oakland, CA ([http://CashBet.com](http://cashbet.com/))
Developed the iOS SDK to provide an api for iOS game developers to add real-money capability to their casino games.  Added real-money capability to in-house and partner casino game apps.

**Major Projects - 2012 to 2014 with Frameware Corporation**

* **December 2014** - Released iOS navigation app [Path-Ways](https://itunes.apple.com/us/app/path-ways/id943989626?mt=8) in App Store, to provide Google Maps access to historical GPS
* **September 2014** - Released iOS app [MyLocation](https://itunes.apple.com/us/app/my-location/id912489650?mt=8) in App Store, to provide Google Maps to pin drops
* **July 2014** - Released iOS app [GetList](https://itunes.apple.com/us/app/get-list/id895998755?mt=8) in App Store
* **June 2014 -**Released iOS app [MedLog](https://itunes.apple.com/hk/app/med-log/id885623586?mt=8) in App Store
* **July 2013 -**Released iOS app [Auditor](http://muehring.com/QL.jpg) to private Elance client.
* **March 2013 -**Released iOS app [FamBook](https://itunes.apple.com/hk/app/fambook/id593706480?mt=8).
* **November 2012 -**Released iOS app [Art Gallery 311](https://itunes.apple.com/hk/app/art-gallery-311/id577356332?mt=8&ign-mpt=uo=2).
* **February 2012 - October 2012: FCOL,**Berkeley and **Scientific Investor,**Cupertino, CADesigned and developed interface and trading applications for the Interactive Broker C++ API to buy, sell, and manage large portfolios of individual high-coupon bonds and high-dividend paying stocks using VC++, MFC, and the IB Trader Work Station API.

**Major Projects - 2011 to 2012 with ABS Consulting / EQECAT**

**August 2011 - January 2012: ABS Consulting / EQECAT,**Oakland, CA
Enhanced software for EQECAT's Catastrophe Risk Modeling system ([WORLDCATenterprise](http://www.eqecat.com/software/worldcat.html)) using Visual C++, MS SQL Server, and proprietary modeling and reporting components.

**Major Projects - 2006 to 2011 with Frameware Corporation**

**June 2007 - 2011: Scientific Investor**, Cupertino, CA
Designed and developed interface and High Frequency Trading applications (140K lines of code) using FIX access to Lime Brokerage ([http://www.LimeBrokerage.com](http://www.limebrokerage.com/)).  Applications include [QMan](http://muehring.com/QManGui.jpg), a quote manager interface to Lime's ultra-low latency CITRIUS quote delivery system and [FTrade](http://muehring.com/FTradeGui.jpg), a high-frequency FIX based multi-strategy trading engine that interfaces to Lime's high-speed trading platform.  QMan collects and archives all bids, asks, prints, and other data from EDGA, BATS, INET, EDGX, and UTDF.  FTrade uses the sub-millisecond real-time quotes from QMan to execute its various high-frequency trading strategies.  Hundreds of strategies were devised and back-tested using archived data from QMan, including [Mts](http://muehring.com/MtsGui.jpg) - Micro Trade Strategies, Ojs - Overnight Jump Strategies, FADE - Fading Strategies, [Sts](http://muehring.com/StsGui.jpg) - StarMine Fundamental Trading Strategies, Zts - Zacks Fundamental Trading Strategies, etc.  Numerous database maintenance applications were developed to provide archive and fast access to historical quote data including [QFix](http://muehring.com/QFixGui.jpg) which sorts and merges quote stream data and re-builds the real-time multi-ECN book based on actual ECN time-stamps.  QFix also maintains multiple binary efficient quote archives that are accessible by date, time, and ticker.  Trading software was designed for and runs on a Windows 2003 server co-located at Lime's New York / New Jersey data center.  Software written in VC++ and multi-threaded MFC for Windows.

**January 2006 - June 2007: Scientific Investor**, Cupertino, CA
Designed and developed interface and trading applications using the Genesis Securities API (30K lines of code).  Software written in VC++ and MFC for Windows.

**Major Projects - 1997 to 2005 with Frameware Corporation**

**January 2005 - November 2005: Private Investors**, Walnut Creek, CA
Designed and developed desktop software to acquire real-time stock quotes and provide real-time alerts to professional day-traders.  Several desktop tools were developed to maintain various stock data databases and manage portfolios.  Software written in VC++ and MFC for Windows using multi-threaded HTTP for web access.

**August 2004 - December 2004: TheraLife Inc.**, Los Altos, CA (TheraLife.com)
Designed and developed middleware and Office tools to manage sales and order processing, invoicing, and accounting.  Data acquisition tools were written in VC++ and MFC to transfer data from a web based SQL Server data base to a desktop Access database for local processing.  The Office tools were written in VBA for Microsoft Word 2000.

**June 2003 - July 2004: Lawrence Livermore National Laboratory**, Livermore, CA ([http://www.LLNL.gov](http://www.llnl.gov/))
Designed and developed desktop software to implement the LLNL photo-ID badging system.  The software (80K lines of code) was written in VC++ with MFC and used third party APIs to access video camera equipment, flash units, and badge printers.  Access to a secure Oracle data base was provided using ODBC and the MFC CDatabase classes.  The system delivered was a complete rewrite of a Mac based badging system that was no longer supportable.  Training was provided to client users.  Samples of the user interface may be found at [sample1](http://muehring.com/Livermore%20Labs%20Access%20Control%20Badging%20System%20-%20User%20Interface%20Example%201.jpg) and [sample2](http://muehring.com/Livermore%20Labs%20Access%20Control%20Badging%20System%20-%20User%20Interface%20Example%202.jpg).

**December 2002 - May 2003: V.C. Summer Nuclear Plant**, Columbia, SC ([http://www.scana.com](http://www.scana.com/))
Designed, developed, and installed X86 firmware to interface existing Aydin monitors, keyboards, and alarms with an existing Data General based intrusion detection and access control system.  Software was written in C and X86 assembly.

**October 2002 - November 2002: Cacheon Inc.**, San Francisco, CA (formerly [http://www.cacheon.com](http://www.cacheon.com/), now dissolved)
Designed and delivered a user interface similar to that of Microsoft's Visual Studio for demonstration and reference purposes for the in-house software developers who were migrating their software from Unix to Windows.  The software was written in VC++ with MFC and used most of the MFC user interface classes including dockable toolbars, multiple panes, splitter windows, tree controls, dialog bars, tab controls, and image lists.  A sample of the user interface may be found at [sample](http://muehring.com/Cacheon%20Computing%20Fabric%20Studio%20-%20Generalized%20User%20Interface.jpg).

**December 2001 - September 2002: Dazzle**, Milpitas, CA ( [http://www.dazzle.com](http://www.dazzle.com/), now called Pinnacle Systems)
Designed and developed a shrink-wrapped Setup Wizard for a new release of the MovieStar application for Dazzle.com.  The software was written using VC++, MFC, WDM drivers, and client ocx's  A sample of the user interface may be found in the help files for the stand alone program at [sample](http://muehring.com/Dazzle%20Diagnostic%20for%20MovieStudio%20-%20Help%20File.hlp).  The program was incorporated into and installed by InstallShield and can be downloaded from [Dellï¿½s drivers ftp site](http://support.dell.com/support/downloads/download.aspx?c=us&l=en&s=gen&releaseid=R26886&formatcnt=1&fileid=32051)..

**June 2001 - November 2001: StarVox Communications**, San Jose, CA ( [http://www.StarVox.com](http://www.starvox.com/))
Designed and developed a user interface for Netscape LDAP tools which were incorporated into the company's VoIP products.

**January 2001 - May 2001: Critical Path**, San Francisco, CA ( [http://www.CriticalPath.net)](http://www.starvox.com/)
Enhanced existing VC++ software to provide synchronization for Critical Path calendar tools.

**January 2001 - May 2002:** Developed architectural, grading, structural, and detailed designs for a three-story drilled-pier supported stick-built house on a sloped lot in Walnut Creek, CA.

**7/99-4/00    July 2000 - December 2000: Commerce One**, Walnut Creek, CA ( [http://www.CommerceOne.com)](http://www.commerceone.com/)
Added new e-commerce functionality to supplier integration modules for CommerceOne's MarketSite web site using ATL (active template library), COM (component object model) and DCOM (distributed COM).  Software written in VC++.  Other utilites written using MFC.  CommerceOne went on to be valued at almost $20 billion before being delisted from Nasdaq just four years later with a value of $2 million.

**12/98-7/99    December 1999 - June 2000: Personal Disc**, San Jose, CA (startup never capitalized[)](http://www.commerceone.com/)
Designed and developed MFC/DCOM multiple server system for automated kiosk distribution of Cdrom software and music for a San Jose startup.  The demonstration system worked well just as MP3 technology and Napster were being developed.  The company was a little too far ahead of its time.

**2/98-12/98    July 1998 - November  1999:  Aerojet / NASA**, Sacramento, CA ([http://www.Aerojet.com](http://www.aerojet.com/))
Designed and developed an MFC MDI command and control real-time telemetry system for attitude control of Aerojet / NASA research rockets.  Rocket science was employed to implement the control system.  The program was written in VC++ with MFC and used a multiple document user interface, a sample of which can be viewed [here](http://muehring.com/Ground%20Support%20System%20for%20Aerojet%20Rockets%20-%20User%20Interface.jpg).

**July 1997 - June  1998: Telemail Corporation**, San Ramon, CA
Designed and developed an MFC application to provide an email text-to-speech system.  The program was written with VC++ using MFC, Access, TCP/IP, ISAPI, POP3, SMTP, ActiveX, voice I/O, and interfaced to Lucent Technologies text-to-speech ocx's.  It processed speech I/O using Dialogic voice boards.

**January 1996 - June  1997: Fastframe Corporation**, San Ramon, CA
Designed and developed an MFC application to provide a point-of-sale order processing, accounting, and store management system with distributed data collection, data warehousing, and data management.  The application was written with VC++ using MFC.  It was used in various retail locations.

**Major Projects - Prior to 1997 with Appropriate Technology Corporation**

* (290K lines of Fortran and 340K lines of assembly for various hardware platforms)
* Created and installed embedded DSP modules and software applications for voice verified access to computer networks, data bases, and PBXs. Created and installed the first Home Arrest Voice Verification System for various county government departments of corrections and probation. Designed and developed the first commercially viable Voice Verification Access Control System.  Software written in assembly and C for Texas Instruments digital signal processors and assembly and C for X86 processors using Dialogic voice I/O boards.
* Created and operated sophisticated voice response systems for entertainment and sports industries.  Software written in Fortran for DOS pc's using Dialogic voice I/O boards.
* Designed, developed, and installed large scale access control and intrusion detection systems for seven nuclear power plants.  Software written in Fortran, Flex, and assembly for Data General S280 mini-computers.
* Designed, developed, and installed large scale automated records retrieval systems for General Electric and the Saudi Government.  Software written in Fortran, Flex, and assembly for Data General S280 mini-computers.
* Developed large data base management systems for Texas Utilities, Power Authority of New York, and other nuclear utilities using Data General mini-computers.
* Developed complete mainframe operating system for Lawrence Livermore Laboratory to run Control Data and Cray software.  Software written in assembly for CDC 7600 mainframe computers.  Secret and Q-clearance status required.
* Developed Fortran and Snobol compilers and executors for the University of California at Berkeley.  Software written in assembly for CDC 6400, 6600, and 7600 mainframe computers.