

## **Resume for C. Keith Ray**

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**Objective:** to be part of a small team developing an insanely great product; to design, build and ship high quality applications; to collaborate with fellow programmers.

Keith Ray has been a professional programmer since the mid-1980's shipping shrink-wrapped and other software on Macintosh, Windows and Unix platforms using C++, Objective-C and Java. In recent years, he has concentrated on mastering Design Patterns, Extreme Programming and Test-Driven Development, as well as agile team-work practices.

He is passionate about improving code quality and software ease-of-use, while pragmatic about delivering products on time. Keith has published articles about XP and Refactoring; he blogs on Test-Driven Development and other topics.

### **Work experience**

#### **Industrial Logic, Inc.**

December 2006 – October 2011

Provides mentoring for teams learning agile software development, test-driven-development, design patterns and refactoring. Clients include a large search-engine company and a major financial services company. Presented training at several large conferences. Worked on educational content including creating and translating lab exercises in Java, C#, C, and C++.

#### **Intuit**

February 2005 – November 2006

Senior Software engineer for QuickBooks for MacOS X, using Objective-C, C++, Carbon, and Cocoa, and Cocoa-Java-bridge. Designed and developed web-enabled connection to PayCycle payroll, including QXML import/export and Apple's WebKit framework. Designed and developed connection with Java-based registration client. Extensive work in many areas of the application. Improved unit testing framework. Participated in release planning/estimating, iteration planning/estimating, refactoring, and behavior-driven design.

#### **Electronics For Imaging**

1999 to February 2005

Team leader for FieryScan and FieryRemoteScan, EFI ScanBuilder 1 and 2, and EFI Hotfolders 2.0 for MacOS X. Designed and developed FieryRemoteScan, EFI ScanBuilder 1 and 2. FieryRemoteScan and ScanBuilder are implemented in Java and C++

on Windows and Macintosh MacOS 9 and MacOS X, using Extreme Programming practices. Experience with image processing, Java, JNI, TWAIN and PDF.

**Pixera, Inc.**

1997 - 1999

Designed core cross-platform image-processing architecture, including image input/output, efficient image-processing and filtering capabilities, digital camera control, digital camera input/output. Implemented and tested this architecture, including system-dependent code for MacOS and Win32, and portions of the user-interface code on both platforms. Enhanced and bug-fixed Viewfinder (image-acquisition), Studio (image editing), and Album (image database) application for MacOS and Windows 95/98/NT using in C++ with PowerPlant and MFC class frameworks, greatly improving the user-interface and overall stability. Added balloon-help and limited scripting. Internationalized the application for Japanese releases.

**Apple Computer, Inc.**

1995 - 1997

Enhanced SLOW (Simple Input/Output Library). Fixed bugs, added Balloon-help and Core Apple Event support, added configuration options including automatic saving of I/O to files, and improved the user-interface based Apple's human-interface guidelines and user requests. Enhanced MPW's standard C libraries, including the StdCLib shared-library that ships as a built-in part of MacOS 7.6 and later. Designed and coded major portions of a multiprocessor-safe version of StdCLib using the Multiprocessing API for Power Macintosh. Replaced inefficient code in the StdCLib ANSI-C memory routines: malloc, calloc, realloc, free. Reimplemented these routines for a significant speed increase, better low-memory safety, and improved ability to debug the heap data-structures. Resulted in 5% to 15% speed increases for a heavy user of malloc: the MPW C++ compiler, mrcpp, in tests.

**Other previous employers:**

**Kodak Health Imaging Systems, Inc.** Plano TX.

C++ on Windows, Unix, MacOS.

**Hofbauer Inc.** Dallas TX.

Educational software on NextStep computers. Objective C.

**Ideal Learning Inc.,** Irving, TX.

Educational software on MacOS and Windows.

**UT Health Science Center** in Dallas TX.

Medical imaging software, FORTRAN, Pascal, C, MacOS.

**Education:**

1986 Baylor University, TX Bachelor of Science in Computer Science; Weinberg Writers Workshop; Weinberg & Weinberg Problem Solving Leadership; Solaris Threads.