

# Baron L Roberts

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**Mission** Write great code, work with great people, realize great ideas, ship it and change the world

## **Professional Experience** **Staff Software Engineer**

LinkedIn, Inc Mountain View, CA 2013 – Present

Member of a world-class tools team crafting development infrastructure for use by hundreds of engineers throughout the organization. Projects include the design, implementation, deployment and evangelism of code quality infrastructure and tooling, development productivity infrastructure and IDE plugins, and specification of development hardware configurations.

## **Principal Engineer**

MobileIron, Inc Mountain View, CA 2011 – 2013

Architect of a highly scalable mobile device management platform deployed both as a sealed appliance and a hosted service. Emphasis on scalable data grid technology, clustered system management, packaging and deployment.

Establish software development best practices across all teams. Emphasis on build infrastructure, test frameworks, test coverage and static analysis.

## **Principal Architect**

Dash Navigation, Inc Sunnyvale, CA 2007 – 2011  
Subsidiary of Research In Motion Limited

Architect for the BlackBerry Traffic handheld application. Design and implementation of the Travel Time API in the BlackBerry handheld SDK. Design, implementation and evangelism of a BlackBerry Unit Test framework, currently deployed as part of the WebWorks SDK

Porting of Qt framework non-graphical layers to iOS.

Architectural support and technical consultation for all Dash development teams. Define and roll out software best practices, tooling, and procedures for all Dash development teams. Crafted Dash's build infrastructure to support development of BlackBerry, iPhone, embedded Linux, and Server applications.

## **Senior Computer Scientist, Advanced Technology Lab**

Adobe Systems, Inc. San Jose, CA 2000 - 2007

Lead developer on small teams defining, designing and implementing a wide range of advanced products and technologies in the document, voice, business analytics and visualization areas. Highlights include creating self-contained interactive visualization applications in SVG that integrated with a business analytics back end, and architecting the next generation of the PDF document format.

## **Engineering Manager, Advanced Technology Group**

Managed team of five engineering, business and product design professionals in architecting and implementing a graphical voice application authoring tool.

## **Senior Software Engineer**

Geocast Network Systems Menlo Park, CA March – July, 2000

Architected and implemented complete advertising targeting and tracking system. Due to the broadcast nature of the system, a standard web ad targeting system could not be used. Major components included relevance and preference based

targeting, and ad impression and user event logging.

Worked closely with the user experience team to develop an HTML/Javascript framework supporting highly dynamic web applications.

### **Principal Engineer**

Technology Education Network      San Mateo, CA      1999 - 2000

Architected and implemented a business to consumer, subscription-based e-commerce system built around a CyberSource credit card processing component and a SQL Server backend.

Developed a subscription-based video training portal. Data driven design for content cataloging and viewership reporting, user authentication and usage logging.

Established best practices for software development including revision control, rollout staging and defect tracking.

### **Principal Engineer**

Silicon Graphics, Inc.      Mountain View, CA      1989 - 1999

Linux/Windows/IRIX Technical Strategy

Lead a small tactical senior level team tasked with developing corporate technical strategies for a wide range of technical issues involving the Linux, Windows NT, and IRIX operating systems. Issues included interoperability, cross-platform application development, object technologies (e.g. COM), and internationalization.

Linux Development Infrastructure

Architected and implemented a build and packaging infrastructure for Linux software products. Included integrating packaging using Red Hat Package Manager with builds using gmake and a host of other Linux tools.

Technical Lead, HTML Authoring Product (Linux)

Lead a small team to create the next generation WYSIWYG HTML authoring tool for the Linux desktop. Features included round-trip engineering, DTD-based HTML parsing and style sheet support.

### **Member of the Technical Staff**

Windows Development Infrastructure

Lead the effort to ramp-up internal SGI IRIX developers to Windows NT development. Included design and implementation of a Windows software build process and tools, selection and deployment of tools, authoring of internal and external whitepapers, and training curriculum development. Used to build and package all SGI Windows software products.

Technical Lead, HTML Authoring Product (IRIX)

Lead team of five in design and implementation of the HTML authoring tool CosmoCreate™. Personally architected and implemented the HTML source editor, frames creation/editing tool, mechanism for round tripping HTML tags, spell checking interface, search/replace, help system, screen/printer rendering abstraction layer, PostScript output engine, UI toolbar and tool palettes, and many other aspects of the application. In addition, responsibilities included scheduling, effort estimation and recruitment.

Printing/Scanning System

Core team architect and implementer for Impressario™ printing and scanning product. Responsible for PostScript raster image processor integration and front/back end development, file format conversion filters, image quality

enhancement filters (halftoning, color gamut compression), GUI tools for print jobs submittal and printer management, low level print spooler API design and development.

#### Video Products

Architected, and implemented software for a real-time scan conversion video product, VideoCreator™. Responsible for low level API development, end user command-line and GUI application designing and development, documentation and manufacturing diagnostics.

### Senior Engineer

Exponent / Failure Analysis                      Menlo Park, CA                      1982 - 1989

#### Engineering Visualization Project

Created software to process computed tomography (CT) scans of engineering components into volume visualizations (PIXAR image computer with Sun host). Image processing requirements and software development for image noise reduction (median filtering), CT scan correlation with Finite Element models (tie point warping), CT scan enhancement (image thresholding, histogram equalization).

### Engineer

#### Portable Eddy Current Device Software Project

Co-designed and implemented low level driver software and user interface modules for portable computer based eddy current instrument. Also implemented algorithms for eddy current signal processing and visualization. Project responsibilities also included writing documentation, designing a software manufacturing and QA process, and supporting end users.

#### Testing and Materials Lab Projects

Design tests for engineering materials to determine cause of component and system failures. In field strain gauging, testing and data analysis. Specialized in instrumenting, testing and analyzing residual stresses in engineering components. Testing conditions included nuclear industry QA procedures.

### Sole Proprietor

C Thing Software                      Sunnyvale, CA                      2001 - Present

Sole-proprietorship company for developing and downloading "spare-time" products:

- CMake Editor, an Eclipse plugin for editing CMake files
- Meazure™, a screen measurement and capture utility

### Education

#### MS Computer Science and Engineering

Santa Clara University                      Santa Clara, CA                      1986 - 1989

#### BS Mechanical Engineering

Stanford University                      Stanford, CA                      1978 - 1982

#### Coursework in Molecular Biology, Nanotechnology, and UML

U.C. Santa Cruz Extension                      Santa Clara, CA                      2003 - 2004

#### Professional Sequence Award in Windows Programming

U.C. Santa Cruz Extension                      Santa Clara, CA                      1997 - 1998

**Recent Languages, SDK's and Technologies**

Java, Ruby, Groovy, C++, JavaScript, jQuery, CSS, SVG, XML, XPath, XSLT, SQL  
BlackBerry, Android, iPhone, Eclipse PDT, Atlassian Plugins (JIRA, Confluence, Fisheye)  
Spring, Hibernate, Servlets, AJAX, YUI, JSP, Velocity, iBatis  
JUnit, TestNG, Hamcrest, Checkstyle, Coverity, Findbugs, JDepend, Cobertura, Clover  
Maven, Make, CMake, Ant, Gant, Gradle, Hudson (Jenkins)  
Puppet manifests and custom types, RPM and APT package creation, ISO creation

**Patents and Licenses**

U.S. Patent 7289812 – Location Based Bookmarks (assigned to Adobe Systems)  
Licensed Professional Mechanical Engineer, CA #23895  
Licensed Private Pilot, Single Engine Land

**General**

United States citizen