



## Irwin W. Coleman III

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### Objective

Seeking a lead/principal development role, with a strong focus on User Interface development, ideally for consumer facing products.

### Skills

- Technical lead experience on multiple projects; Mentor and advisor to other developers, including code reviews and design reviews; early startup employee
- Design leadership and collaboration with User Experience staff and Product Management
- Web development using HTML, CSS, Javascript, JSON, AJAX and rich web user interfaces
- Mobile Development for iOS, Android and HTML5, including Cordova/PhoneGap
- User Interface development with React.JS and Flux, Backbone, JQuery, Ext.js, Cocoa/Cocoa Touch, Android/Android NDK, Win32, Qt
- Server side development for web services in Node.JS, Java, C++, PHP, including RESTful service development
- HCI, User Interface Design, UI Accessibility, Unicode and Internationalization issues
- TCP/IP networking, HTTP network streaming, Web sockets; streaming audio and video, computer graphics & vision

### Education

Georgia Institute of Technology – MS Computer Science, Dec. 1999

Georgia Institute of Technology – BS Computer Science, June 1996 (Highest Honors)

### Experience

#### PRINCIPAL ENGINEER, YAHOO – OCT 2014 - AUGUST 2015

- Provided technical direction for feature implementations and prototypes; Prioritized feature development with Product Management; Oversaw six international market releases of SDK content; Led a team of six engineers
- Performed extensive code review of team submissions and defined best practices for development in the Search Distribution team for multiple Yahoo Search products; Provided input to the Director of Engineering and other Team Leads for performance reviews for engineering staff
- Tech Lead for the Search in Apps Mobile Search SDK [<https://developer.yahoo.com/search-sdk/>], Mobile Web and Native development, front end web development in Node.js and React.js using the Flux architecture
- Developed a React.js based web front end applying the Flux architecture for Yahoo search results; web content was tightly integrated with native iOS and Android SDK wrappers providing deeper mobile application integration; Ensured React based web content supported touch based interaction models for it's Mobile SDK target
- Oversaw development for the RESTful BOSS Search API [<https://developer.yahoo.com/boss/search/>] (Node.JS, C+, Apache Traffic Server)
- Extended functionality for a complete Continuous Integration pipeline including automated unit and functional tests with pushbutton deployment; developer checkins triggered unit tests, functional tests, rendering tests, and finally server deployment

#### SENIOR STAFF ENGINEER, SAMSUNG MEDIA SOLUTIONS CENTER OF AMERICA – APRIL 2013 - AUG 2014

#### SENIOR PLATFORM ARCHITECT, MOVL, LLC– FEB 2012-APRIL 2013 (ACQUIRED BY SAMSUNG)

- Early employee of MOVL; Core member of the three member Platform Team for developing core platform features; joined Samsung as essential personnel as part of MOVL's acquisition
- Lead engineer for the Android client SDK for the Samsung Multiscreen SDK, which now ships with Samsung Smart TVs. The SDK allows multiple users to connect and interact with a Smart TV using their mobile device (<http://multiscreen.samsung.com>); built out unit testing & unified Maven build system for all Android libraries

- Prototyped native C++ library implementations for Samsung Multiscreen SDK services for key partner integration, including a library ported across Linux, OSX, iOS, Windows, and the Android NDK
- Developed features for the Kontrol TV Smart TV & mobile applications using HTML5, Backbone, Socket.io, NodeJS, along with Apache Cordova (Phonegap) wrappers for Multiscreen Services for mobile applications
- Ported MOVL Connect communication libraries to run on various embedded Javascript runtimes to enable Websocket fallback to XMLHttpRequest polling or JSONP polling
- Assisted with CSS styling fixes for various MOVL applications running in mobile browsers; Assisted the Application teams to debug their applications and support projects in crunch times; developed samples and demos for the MOVL and Samsung Multiscreen SDKs (HTML5, Javascript, CSS, Java, NodeJS)
- Developed a messaging statistics server in Java that graphed stats using Google Charts (Java, Jackson, Restlet, MongoDB, Google Charts); extended MOVL SDK back-end services (Java, Jackson, Restlet, MongoDB)
- Prototyped an Android hosted Engine.io messaging server on top of Netty that allowed Javascript Engine.io clients to communicate as they would with the official Node.js server (Java, Netty)

#### **SENIOR SOFTWARE ENGINEER; INTERNAP NETWORK SERVICES – MAY 2010-FEB 2012**

- Developed the self service customer signup website for Internap Cloud Storage services (GWT, Java, Javascript, CSS, JAX-RS); Sole developer of the XIP 1.1 User/Administrator Console (Ruby on Rails, JQuery)
- Developed features for the User Account Management RESTful web service to support user signup, authentication and billing integration (Java, JAX-RS, SOAP, Spring, Spring-LDAP, Hibernate)
- Re-architected the IPScope application to address major performance problems and increased Internet Explorer performance of the site by orders of magnitude (GWT); Resolved cross browser CSS layout issues for multiple Internap applications; Built deployment scripts for multiple web applications (Apache, Phusion Passenger, Tomcat)
- Implemented Scrum/Agile practices in our development team for the Signup and UAM projects; Mentored Junior Engineers in development and deployment practices; Established unit testing and integration strategies in the early stages of the User Account Management project to reduce bugs and enable Continuous Integration
- Worked with the User Experience team to design and develop core user interface elements for Internap web applications; Assisted the User Experience design team with requirement gathering and use case analysis for the XIP and Signup User Interfaces; Advocated for tools and technology choices to improve the content pipeline which significantly shortened the transition of UX designs to full implementation

#### **SENIOR SOFTWARE ENGINEER; INFOR GLOBAL SOLUTIONS – JULY 2009-ARIL 2010**

- Extended the ClearUX user interface framework based on Ext.js, which is used by multiple Infor product teams to deliver their applications (Javascript)
- Developed CSS and Javascript extensions to the Ext Grid, Tree, and other widgets; extended the declarative UI specification to support event argument lookups (Javascript, JSON, XML, XSD, Java)
- Extended servlet support for additional developer commands for the ClearUX Framework (Java, Servlets, Tomcat, Maven, Spring)
- Spearheaded effort to expand unit testing coverage of ClearUX widgets; Coordinated significant fix to flaws in the underlying JSON processing;
- Provided forum support for ClearUX users to resolve developer difficulties with the framework; Generated widget designs and standards with UX team members to establish best practice UI patterns for Infor Applications; Coordinated with product team members to resolve usability concerns with particular widgets and use cases

#### **SENIOR TECHNICAL YAHOO; YAHOO! – MAY 2005-FEB 2009**

- Senior Engineer for the Yahoo! Toolbar from versions 6-8; designed and implemented Internet Explorer client features for the Yahoo! Toolbar (ATL, C++, Javascript) ; Redesigned the Toolbar 7 user layout model and a corresponding Customization API, accessible via Javascript; lead design and implementation of RSS feed button client UI and web service for Toolbar 7+ (C++, Win32, PHP); primary engineering lead for the 7.1 US release
- Developed web and backend services for Yahoo Toolbar, including server side support for dynamic Toolbar buttons (PHP, some Perl, C++) , a browser version and distribution deal redirector for <http://toolbar.yahoo.com> (PHP) , server side data source aggregation for Toolbar integration with Yahoo! Updates for the "My Notifications" feature (PHP), and extensions for internal content management tools for Toolbar button creation and editing (PHP)

- Developed Internal JSON library for Toolbar data transfer (C++), that is still in use today in Yahoo extensions
- Acted as the primary Yahoo! Engineering contact for Internet Explorer 7 and 8 add on compatibility, investigating compatibility issues with pre-release builds of IE7 and IE8 onsite at Microsoft; Provided feedback to Microsoft regarding ActiveX addons, including Protected Mode issues; Provided guidance to other engineering groups regarding best practices for working with IE7, IE8 and Vista Protected Mode
- Engineered extensive internationalization client and server support for over 30 locales (C++, PHP, Unicode, I18N); implemented accessibility support for screen readers and related assistive technologies, including work with Microsoft Active Accessibility (MSAA)

#### **SENIOR SOFTWARE ENGINEER; BELLSOUTH – AUG 2004-MAY 2005**

- Designed & prototyped peer to peer Instant Messaging service for Bellsouth Messenger using C++, COM, ActiveX
- Developed cross-platform User Interface controls, using both Windows custom control interfaces, as well as custom controls using the Qt framework for Bellsouth Applications targeting Windows and Mac OSX; Developed an ECMA script (Javascript) scripting sandbox layer for application development
- Member of Architecture Team focused on a next generation UI services; Defined coding standards, tech selections, revision control best practices, and software engineering methodology (e.g. test driven development)
- Designed user interface architecture for the Bellsouth Personal Desktop initiative, including a MVC design for use in Bellsouth applications; Authored design documentation for the BPD UI, and reviewed design documents for related core services, such as user sign-in services, application logging, and system health monitoring
- Iteratively developed the Bellsouth Messenger User Interface using usability test data; Collaborated with the Creative Services team to provide effective User Interface development tools and workflow to empower designers

#### **USER INTERFACE TEAM LEAD; BBC TECHNOLOGY – JULY 2003-JULY 2004**

- UI Team lead for the Screening Support System [Triple S] for ESPN for use in their broadcast workflow for broadcast television programming; Led team of two developers for user interface implementation of the Triple S user interface; Architected the UI framework and middleware integration interfaces
- Implemented the Triple S user interface for video metadata annotation using COM, ATL, WTL and Java middleware using XML based messaging; Integrated Quantel Digital video solutions and QView Lite for video playback
- Collaborated with ESPN senior management to document ESPN legacy workflow for the highlight screening process; Developed wireframe designs for the resulting Triple S interface with BBCT User Experience staff; Provided prototype UI to select user populace for feedback and iterative UI development

#### **WINDOWS APPLICATION CONSULTANT; BELLSOUTH.NET – MAY 2002-JULY 2003**

- Email & Instant Messaging applications for BellSouth.Net customers using using C++, ATL, and Visual Studio.NET
- MSN Messenger protocol plug-in, XMPP (Jabber) Messaging (TCP/IP, Jabber, XMPP, XML, SAX, C++)

#### **CLIENT SOFTWARE DEVELOPER; INCANTA, INC. – JAN 2000-APRIL 2002**

- Created version 1.0 and 2.0 of the Windows client application for Incanta Music, an internet radio service for Broadband Internet users as lead UI developer, and expanded work to a four person team for versions 3 and 4, using C++, MFC, COM, ActiveX; initial versions used to secure \$15 million in company VC funding
- Developed the Service Navigator product, a Sidebar add-on for Internet Explorer (C++, COM, ActiveX)
- Provided knowledge base for product's technical support, and improved reliability based on common issues
- Performed iterative User Interface design using usability lab evaluation; final usability testing rounds showed our changes had addressed our top usability problems; Acted as user advocate in design meetings to balance usability with marketing proposals

#### **MEMBER OF SCIENTIFIC STAFF; NORTEL NETWORKS – JUNE 1996-SEPT 1998**

- Developed user interfaces for Network Management software for Nortel networking equipment in C++ on Unix
- Developed embedded command line front end for AccessNode Express network element in C for PSOS+

*References Available on Request*