

## **SUMMARY:**

I am a leader in user interface engineering. I collaborate with business and technology teams to shape and translate business requirements into robust user interfaces, UI frameworks, and tools. I am seeking a position that will allow me to broaden my UI engineering experience within a customer-focused organization.

## **EXPERIENCE:**

### SENIOR FRONT END ARCHITECT, SOFTWARE ENGINEERING

Hotwire Group, Expedia, Inc. (San Francisco, CA), August 2006 - present

Company Focus: Consumer travel web applications

- Architectural ownership and coding of presentation layer frameworks that integrate client side and server side technologies using object-oriented JavaScript, AJAX, CSS3, HTML5, JSP, Tiles, Spring MVC, and Struts. Support developers directly and indirectly through documentation and reference implementations.
- Work with business owners and leaders of UX, Software Engineering, SEO, Operations, and Merchandising teams to refine requirements, estimate projects, and ensure maintainability in the user interface engineering of Hotwire.com, Hotwire international, Travel-Ticker.com and associated administration web applications.
- Technical lead and final point of escalation for the UI Engineering team. Set training goals and review software designs and code for 6 local and 7 offshore (Kiev, Ukraine) UI Engineers. Represent UI Engineering within the wider Software Engineering team. Support monthly major product releases.
- Wide range of technical accomplishments since joining Hotwire, including:
  - Designed, built and maintain AJAX framework integrated into the server-side presentation layer. Reduced the complexity of AJAX programming by providing a simple interface to re-render a given module without the need for additional programming.
  - Implemented developer productivity improvements including creation of an object-oriented JavaScript and CSS component framework integrated into the server-side component architecture. Introduced automated tools such as source control triggers for checking code style (jshint), generating API documentation (JsDoc), and flagging "dead" files, CSS selectors, and JavaScript functions that may impede performance and/or future refactoring. Devised and developed a set of reference implementations of core UI components for training, troubleshooting and testing.
  - Owner of strategic transition from Struts to Spring MVC as Hotwire's core presentation layer framework. Lead integration of existing Tiles 2 view composition framework into Spring MVC, including Ajax framework, OO JavaScript tie-ins, and client side validation.
  - Championed performance best practices. Elevated the discussion of performance issues from an operations-centered concern about "page weight" and bandwidth to a company-wide commitment to a high-performance user experience. Introduced automated performance monitoring through Gomez and ShowSlow. Worked with operations, product and other teams to drive performance goals. Optimized performance by asynchronously loading JavaScript and CSS at the framework level, minifying and concatenating JavaScript and CSS while retaining the ability to debug in development, and improving cache utilization of static resources.
  - Built an automated functional testing infrastructure using Selenium 2 / WebDriver and TestNg.

### PRINCIPAL USER EXPERIENCE ENGINEER

Model N, Inc. (Redwood City, CA), October 2000 – August 2006

Company Focus: Suite of enterprise web applications for contract management

- Technical lead (and later manager) of a strategic team of 5 user experience engineers, researchers, and designers. The User Experience team was responsible for

company-wide UI framework engineering and interactive design. Periodically supervised offshore contractors, including in-person visits to India.

- Directly responsible for UI component framework package of 1,000 Java classes and associated JavaScript, CSS, and JSP. Shipped eight major releases of the product. Supported 30 application developers and 40+ implementation engineers on code base of 14,500 Java classes on three shipping product versions.
- Led user experience initiatives for new modules, including customer visits, usability testing, prototyping, functional specification review, and developer training.
- Built "Client Refresh" AJAX API allowing developers to easily target any portion of the screen to be updated on the fly without a full-page render.

#### SENIOR WEB DEVELOPER

RedLadder, Inc. (San Francisco, CA), January 2000 – October 2000

Company Focus: Web application for the construction bidding process

- Led UI programming effort on top of JSP-based UI framework within a fast-paced start up environment
- Developed functional specifications, test plans, and release criteria with product management, design, and QA teams

#### SENIOR ASSOCIATE

Square One Productions (San Francisco, CA), August 1997 – December 1999

Company Focus: Visual simulation and analysis of urban development proposals

- Constructed visual simulations and site maps of urban development proposals for environmental review, marketing, and comparison of alternatives
- Managed production staff and technical aspects of client relations
- Presented seminars on visual communication tools for city planning including web development, photosimulation, real-time 3D, and animation

#### CONSULTANT

Self-Employed (San Francisco, Seattle, and New York), September 1996 – March 1999

Company Focus: planning support systems using 3D, GIS, and web development

- Dames and Moore Group, Fourth Dimension Interactive (San Francisco, CA)
  - Created real-time 3D/VRML component of facilities management application prototype for San Francisco International Airport
- Environmental Simulation Center (New York, NY)
  - Developed proof-of-concept project for 3D GIS system using MultiGen Creator and ESRI ArcView
- City of Seattle, Seattle Design Commission (Seattle, WA)
  - Conceived, produced, and facilitated the use of 3D/VRML models of Seattle's Pike Street in city-sponsored urban planning forum
- On the Ground Magazine (Seattle, WA)
  - Produced online version and edited features about technology in planning

#### **EDUCATION:**

Degree Programs:

MASTER OF URBAN PLANNING University of Washington, Department of Urban Design and Planning (Seattle, WA)

Concentration in real-time 3D simulation and Geographic Information Systems

BACHELOR OF ARTS, HISTORY University of California (Santa Cruz, CA)

Concentration in 19<sup>th</sup> and 20<sup>th</sup> century European intellectual history

Other Education:

Certificate in Geographic Information Systems, Foothill College (Palo Alto, CA)  
International Program in City Planning, Arizona State University Study Tour (Europe)

**SKILLS:**

*General: UI engineering and frameworks, website performance optimization, cross-department collaboration, team management, software development lifecycle, interaction design, search engine optimization*

*Programming: JavaScript, AJAX, CSS, Yahoo YUI Library, Spring MVC, Struts, Tiles, Java, JSP, HTML, DOM, HTTP, Freemarker, JQuery, XML, Servlets, PHP, SVG*

*Tools: IntelliJ Idea, Eclipse, Emacs, Perforce, CVS, Tomcat, Bugzilla, Apache HTTP Server, Toad, WebLogic, Charles Proxy, Firebug, Selenium, TestNg*

**PUBLICATIONS:**

"Visualization Toolbox" InfoTEXT, American Planning Association Information Technology Division Magazine, March 1998

"Visual Simulation in Urban Planning: The Pike Street Virtual Reality Project." Masters Thesis, University of Washington, July 1997

**HONORS:**

Tau Sigma Delta, United States Honor Society for Architecture and Allied Arts

Washington State Honor Award, American Planning Association, "Youth Planning" Graduate Student Project

Statewide Scholar, Washington State American Planning Association

Honors in the History Major, University of California (Santa Cruz, CA)

**INTERESTS:**

Foreign travel, including multiple visits to the United Kingdom, Ireland, France, Italy, Spain, Germany, Argentina, Mexico, Canada, Ukraine, and India

Historic maps and cartography

Exploring new places on foot