

Jim Bigelow
3320 Spiceland Drive
Boise, ID 83704
January 13, 2013

Balihoo
404 South 8th Street
Suite 300
Boise, ID 83702

Dear Balihoo Human Resources Director:

I am a software developer with a history of delivering successful projects at Hewlett-Packard. I have a longstanding interest in web development and I would bring to your company a broad range of skills, some of which are highlighted below. After reading an article in the Idaho Statesman that mentions a dearth of software developers in the area, I wanted to send you my resume.

I am current in web development topics such as:

- Software as a Service, Ruby on Rails, JavaScript, HTML and CSS. Here are the URIs for an example project I am working on:
 - [TransForm Idaho Candidate Information](#)
 - Deployed: <http://immense-forest-6797.herokuapp.com/>
 - Github: https://github.com/jim-bigelow-swe/candidate_info.git
 - Pivotal Tracker: <https://www.pivotaltracker.com/projects/703687/overview>
- Behavior and test-driven development, most recently with cucumber and rspec and Agile development practices
- Object Oriented Design using C++ and Ruby, along with experience dealing with non-deterministic, multi-threaded systems.

My main strengths are my ability to master new technologies and my passion for software development. I have both a BS and MS in computer science that I gained while developing software. This combination of experiences gives me the ability to quickly learn new technologies and gain new skills.

I welcome the opportunity to further discuss a position with you. Please contact me at 208-629-0321 or by e-mail at jim.bigelow.swe@gmail.com. I look forward to hearing from you.

Sincerely,

A handwritten signature in blue ink that reads "Jim Bigelow". The signature is fluid and cursive, with the first name "Jim" and last name "Bigelow" clearly distinguishable.

Jim Bigelow

Jim Bigelow

3320 Spiceland Drive • Boise, Idaho, 83704 • 208-629-0321 (Home), 541-231-3881 (Cell)
jim.bigelow.swe@gmail.com www.linkedin.com/in/JimBigelowSoftwareEngineer

I am a software professional with a history of delivering successful projects at Hewlett-Packard. I have a longstanding interest in web development with recent training in SQL, Software as a Service, Ruby on Rails, machine learning and web analytics. I've developed software on both Unix and Windows and have expertise in fast, efficient XML processing.

TECHNICAL SKILLS

Software Development Tools and Environments:

- *Web Development:* SQL, Ruby on Rails, Cucumber, Rspec, SimpleCov, XML 1.0, XHTML 1.0, HTML, CSS, XHTML-Print, CSS-Print, Adobe Photoshop
- *Programming Languages:* Ruby, C#, C++, C
- *Unix and Linux:* C, C++, bash and ksh shell scripting, sed, grep, AWK, Yacc, Lex, Make, git, ClearCase, Data Display Debugger (DDD), GDB, gawk, Bison, flex, XEmacs
- *Windows:* Visual Studio C++ and C#, .NET Framework, CE 6.0, Native C++ interoperability with C#, PowerShell, git, Visual Studio
- *Development Methodologies:* Agile/Scrum, Behavior and Test Driven Development
- *Configuration management:* version control, branching, merging, release management

Personal Skills:

- Excellent written and oral communications
- Excellent interpersonal skills
- Excellent organization and time management skills

PROFESSIONAL EXPERIENCE

HEWLETT-PACKARD COMPANY, Boise, ID

Software Engineer, Firmware

2008 – 2012

Technical lead for measuring and evaluating testing efficiency of 30K black box tests for approximately 500K lines of C/C++.

- Designed and implemented software utilities to extract, summarize, compare and visualize code coverage data from test execution, using C#, .NET framework, XML processing classes, and the Visual Studio Code Coverage library.
- Designed and implemented data analysis software utilities for extracting actionable data from the gigabytes of raw coverage data from 400 tests.
- Designed and implemented a MySQL relational database schema for the code coverage data and SQL queries to determine the best test to use when qualifying code changes.

Technical lead for managed/unmanaged interoperation while porting legacy code from Linux to Windows.

- Designed and implemented the managed interface to the legacy code using C#, the .NET framework and Visual Studio 2008 and the Windows development environment for XP and CE.
- Designed and implemented an interoperating layer between legacy C++ code and .NET code allowing reuse C/C++ code with only minor changes, using C++, MSCOM and VS 2008.
- Designed and implemented a C# reentrant, thread-safe initialization interface for the RIP, allowing non-deterministic accesses in the multi-threaded operating environment.
- Designed an efficient XML format for data interchange between managed print pipeline components (C# and .NET), and the native C++ RIP and implemented XML processing in a low overhead thunking layer between the managed data contracts and the legacy RIP data structures. This required designing and implemented efficient XML processing with both C# and the .NET framework and in native C++ using MSXML.

Jim Bigelow

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Software Engineer

2005 – 2008

Software architect responsible for delivering a solution where HP LaserJet internal information can be repurposed for multiple uses.

- Created a Model-View-Controller software architecture in C++ for providing device information as an XML document that can be emailed, viewed on a web page or printed. Used Expat, the open-source XML parser, for efficient XML processing in C++ in a Linux development environment.
- Created a lightweight design that was scalable from low- to high-end LaserJet products documented using UML.
- Implemented the design in C++ for a high-end LaserJet and worked with product teams to help them leverage my design and implementation in their products.

Software Engineer

2002 – 2005

Technical lead for LaserJet support for XHTML-Print and CSS Print.

- Represented HP as specification editor and co-author at the Printer Working Group and the World Wide Web Consortium's XHTML and CSS working groups to complete and gain approval for XHTML-Print and CSS Print Standards.
- Specified the LaserJet implementation of XHTML-Print and CSS print profile.
- Lead a team of software engineers to implement an HP LaserJet Page Description Language in C++ for processing and printing XHTML-Print conforming documents.

EDUCATION

Master of Science, Computer Science, Algorithms & Data Structures

The National Technological University, Fort Collins, Colorado

Bachelor of Science, Computer Science,

Portland State University, Portland, Oregon

PROFESSIONAL DEVELOPMENT

- Web Intelligence and Big Data
- Mastering the .NET Framework with C# 2.0
- Digital Image Processing & Compression
- Software as a Service
- Tracing Documents with Stegatonnes

PUBLICATIONS

- *XHTML-Print*, W3C Candidate Recommendation, Jim Bigelow, World Wide Web Consortium, January, 2004.
- *CSS Print Profile*, W3C Candidate Recommendation, Jim Bigelow, World Wide Web Consortium, February, 2004.
- *CSS3 Paged Media Module*, W3C Candidate Recommendation, Håkon Lie and Jim Bigelow, World Wide Web Consortium, February, 2004.
- *XHTML-Print Test Suite*, Jim Bigelow, World Wide Web Consortium, April, 2004.
- *Candidate Standard 5102.1-2003 XHTML™-Print*, Don Wright, Melinda Grant, Jim Bigelow, Peter Zehler, Jun Fujisawa, Printer Working Group, March, 2003.
- *Candidate Standard 5102.2-2003 CSS Print Profile*, Don Wright and Jim Bigelow, Printer Working Group, March 2003.

PATENTS

- *Printing Preparation*, US8264710B2, March 2003
- *Dynamic Internal Page Registration and Retrieval System*, 6489972, December, 2002.