# **Brian Pipa**

Washington, D.C., USA brianpipa@gmail.com

- 25 years of full-time Java development experience
- 10 years of Linux server and desktop experience
- Demonstrated history of learning new skills, APIs, libraries, and tools
- Excellent written and verbal communication skills

#### **Technical Skills**

java, linux, git, javascript, css, html, unit testing, junit, selenium, continuous integration, continuous deployment, ci/cd, jenkins, sonarqube, sql, postgres, rest, maven, spring, spring boot

## **Experience**

Senior Software Engineer/Architect – Pangiam, Telecommute from Washington, DC Jul 2022 → present java, linux, git, gitlab, sql, gradle, rest, spring, spring boot, junit, sonarqube, confluence, artifactory

On contract to CBP. I updated the 50+ microservice projects to be junit-ready and analyzed by SonarQube using a gitlab pipeline. I created a standalone tool that creates a SonarQube dashboard in Confluence by using both the SonarQube and Confluence APIs to pull SonarQube data from configured projects. I revamped a commandline tool into a standalone spring boot application to run reports for CBP Internal Affairs. In doing so, I optimized the SQL and Java code to run reports in less than a minute, rather than over 1.5 hours. I created a microservice testing framework that uses REST-asured and allows developers or testers to easily write integration tests for the microservices with only a few lines of code.

Senior Software Engineer - Saks, Telecommute from Washington, DC Jan 2022 → May 2023

java, linux, git, sql, maven, rest, spring, spring boot, mysql, aws lightsail, quartz, oauth

As the solo Java developer, I designed, coded, and released a standalone middleware application using Spring Boot and deployed on AWS Lightsail. This application had two configurations – a development config and a production config. The development configuration used an H2 database and the production configuration used MySQL. This middleware exposed 3 REST endpoints that were called by an internal application, and used a third party library to send and receive data to/from the same third party.

**Solutions Architect/Tech Lead** – DSA, Inc., and PPC, Washington, DC and Telecommute

*Jun 2015 → Jan 2022* 

java, linux, git, javascript, css, html, unit testing, junit, selenium, devops, ci/cd, jenkins, sonarqube, sql, maven, rest, ruby, ruby on rails, rspec, gwt, swing, spring, postresql, db2, ant, ivy, git, jira, confluence, ruby on rails, tomcat

Government contractor to The Office of Management and Budget under the Executive Office of the President

As one of two MAX.gov tech leads, I led a team of 3-6 developers and six web applications (Java and Ruby on Rails) in the MAX.gov portfolio. I worked with government staff to design and deliver solutions, ensure products are delivered on time using agile methodologies, held weekly code reviews, mentored junior developers, and wrote Java code. Approximately 40% of my time was spent writing Java code, the remaining time was spent doing non-coding tech lead/management duties.

#### **Accomplishments**:

- Installed and managed Jenkins, SonarQube, and Selenium. Taught the team to use these tools and we brought the 32+ separate Java projects down to zero bugs and zero security issues (according to SonarQube).
- Taught team to write unit and Selenium tests and we went from zero tests to over 200 tests our Selenium regression test. Likewise, I led the team in increasing the count of unit tests on our 80K lines of Java code from near zero to over 200 by instituting automated testing requirements for all code.
- Automated all deploys (both Rails apps and Java apps) using Jenkins and created an automated deploy to the test environment.

### Responsibilities:

- Provided clear guidance on solution design and development methods as well as collaborating with government staff, fellow contractors, and other relevant parties
- Defined and refined requirements with government staff
- Provided and/or reviewed LOEs to gain efficiencies and set a standard for similar future tasks
- Ensured products are delivered in a timely manner and the team had the technical capability to do so
- Provided clear direction and tasking so the team knows what they are responsible for and how to complete the tasks.
- Provided a production deployment plan to include security and change release board approvals prior to each production release
- Lead weekly code reviews with the development team
- Designed, implemented (with the help of my dev team) and delivered phase one of a brand new Records Management plugin for MAX Community.
- Created a standalone Swing app that tests Analytics users' database connections and helps with troubleshooting when things aren't working properly on a user's desktop

- Created an integration between Pentaho and Atlassian Confluence so that users could auto-attach reports to Confluence
- Created a fully unit tested common java library for all developers to use to encourage code reuse
- Spearheaded the conversion of ten Pentaho instances from version 4 to version 7 and converted them to the Community Edition (saving the government over a million dollars in licensing fees)

**Lead Software Engineer** – National Center For Missing and Exploited Children (aka NCMEC), Alexandria, VA *Jul 2012 → Jun 2015* 

java, gwt, smartgwt, htcondor, mysql, jsp, agile, palantir, sonarqube, jenkins, selenium, ant, tomcat, svn, linux, jira, confluence, ldap, active directory, shiro, maven, junit, spring, json, rest, selenium, html, javascript, css, jasper reports

While at NCMEC, at various times and for various projects, I had the roles of: Lead Software Engineer, Technical Lead, Project Lead, and/or Code Quality Manager for a Java team of twelve developers.

#### **Accomplishments:**

- Technical Lead with a team of 5 other developers on an agile CMS project using Java and Spring with an Angular frontend and MySQL for data storage. Involved in sprint planning, scrums, and technical design, while also coding and leading code reviews of all Java code in the project.
- Project Lead and Technical Lead with a team of 3 other developers on an agile project using Java with GWT/SmartGWT and interfacing with Palantir as the data backend (accessed via webservices) and MySQL for app data storage. Involved in all aspects of the agile process including release planning, sprint planning, scrums, and the actual Java/GWT coding of all parts of the application.
- Code quality manager for all Java developers (~12) in the organization. As such, I instituted company-wide Java coding standards and I lead weekly code quality meetings with all Java developers.
- Championed and implemented the move to Jenkins and SonarQube for continuous integration and code quality monitoring. This included installing and setting up both Jenkins and SonarQube, maintaining them, and teaching the other developers how to use them.
- Gave various presentations to the development team on topics such as Code Quality, Unit Testing, and Getting Real.
- Designed and implemented a more rigorous/structured Java hiring/screening process including a standardized Java test and a list of suggested phone screening questions.
- Performed technical phone and in-person interviews of potential Java developers and made recommendations to management for hiring decisions.
- Independently designed and coded a role and permission management application and API for use by all of the company's applications. This RoleManager uses GWT and Java for the frontend and backend, MySQL for

- data storage, Active Directory for authentication, and a RESTful webservice to allow clients to query for authorization.
- Learned HTCondor and implemented a Java-based solution using HTCondor to distribute our workload of image analysis from a MySQL database to multiple HTCondor servers.
- Designed and implemented a Java/Servlet/HTML 5/CSS/Javascript drag and drop solution for uploading case documents to a remote server.
- Designed and implemented a recursive compressed file unarchiver and image detector in Java using the TrueZip Java library.

# **Senior Software Engineer** – Cisco Systems, Inc - RTP, NC

*Oct 2006 → Jul 2012* 

java, rest, gwt, jsp, servlets, oracle, agile, tomcat, jaxb, jax-rs, linux, mysql, rally, junit, selenium

**Senior Software Engineer** – Gómez, Inc. (now Compuware) - Telecommute  $Nov\ 2005 \rightarrow Oct\ 2006$  java, swing

**Applications Developer** – Contractor with ComSys working for MCI - Cary, NC *Jun 2003 → Nov 2005* java, swing, jsp, struts, tiles, jms, oracle, weblogic, applets

**Software Engineer** – Hummingbird, Ltd. - Raleigh, NC  $1996 \rightarrow Jun\ 2003$  java, swing, j2ee, jsp, servlets

#### **Education**

- PSM-1 certified, 2018
- Esri FedGIS Conference 2017
- Palantir developer training 2013
- MongoDB training 2012
- Learned Ruby/Rails in my spare time 2006
- Sun MicroSystems, Inc. J2EE Technology Forum San Jose, CA 2002
- lavaOne Conference San Francisco, CA 2000
- B.S. Computer Science NC State University  $1990 \rightarrow 1995$ . Graduated debt-free by working nights and weekends during college

# Writing Samples

- OverReader blog
- How to get Rails to talk to Oracle
- Using the Sonar REST API for weekly emails
- Using ant to exec mysql .sql files via a fileset
- <u>Using Active Directory for authentication in Spring with custom permissions (roles)</u>

### **Personal Coding Side Projects**

**OverReader.com - 2023-present** - <a href="http://overreader.com">http://overreader.com</a> java, git, spring boot, spring jpa, jsoup, opencsv

Launched in February of 2023, OverReader gets the books from a user's Goodreads shelf, then searches for them using the OverDrive API and shows the user which books are available. It optionally will show which of the books are available via Kindle Unlimited.

**Customizer Corner - 2022-present** - <a href="http://customizercorner.com">http://customizercorner.com</a> java, git, wordpress, jsoup, opencsv

Customizer Corner indexes products from multiple other sites, similar to BrainyAtom, below. I coded the extensible scraping framework in Java using OpenCSV and Jsoup and a new site can be scraped in as little as 20 or so lines of code. I learned the Wordpress CSV format and was able to output the CSV in a way that Wordpress could import it. I'm now in the process of coding a new frontend and backend using Spring Boot to replace Wordpress completely and allow for much more flexibility.

**Brainy Atom, LLC - 2006-2012** – <a href="http://brainyatom.com">http://brainyatom.com</a>
ruby, ruby-on-rails, sphinx, thinking-sphinx, mysql, hpricot, git, svn, linux

I co-founded Brainy Atom, LLC and co-wrote the code for our various niche search engines. All work was done in my spare time while succeeding at a 9-5 job as a Java developer at Cisco. Learned Ruby/Rails in my spare time and co-wrote the code using Ruby on Rails, MySQL, Thinking Sphinx, and Hpricot. Wrote Ruby code to import data from data feeds in various formats. Also wrote Ruby code using the Hpricot library to scrape data from websites directly. Wrote Rails, HTML, CSS, and Javascript code for the various websites showcasing the data and search engine. Actively involved in all aspects of the day-to-day business side of things such as customer relations, server management, incoming and outgoing funds, etc.

**Mailinator addons - July 2005 - October 2005** - <a href="http://mailinator.com">http://mailinator.com</a> java, rss, google-maps, html, css

I modified the java backend and frontend to provide RSS feeds for all mailboxes to make it easier for users to monitor their incoming email. Designed and implemented a spam map by modifying the java backend and leveraging the Google Maps API to map the spam that Mailinator receives. On the first day of release, the spam map received over 100,000 hits in the first 13 hours and was

mentioned on numerous websites including Slashdot.org and The Washington Post.

**Candy Addict - October 2005-present** - <a href="http://candyaddict.com/blog">http://candyaddict.com/blog</a> php, mysql, wordpress

A candy blog I created and have owned and written for since 2005. I have managed and employed as many as 10 writers at a time and I have edited and written many posts for the site. The blog uses Wordpress (and thus PHP and MySQL) and I've had to do various PHP and MySQL maintenance/coding on the site.

**Pipasoft - 2001-2004** - <a href="http://pipasoft.com">http://pipasoft.com</a> java, jsp, swing, servlets, mp3, pdf, rss

Some old code I wrote and released years ago. Don't really look at the code, just note that I like to code enough that I do it in my spare time for fun and did so years ago.

- MACCC written in Java/Swing, MACCC creates printable (HTML, text, or PDF) CD covers for MP3 CDs or any folder full of MP3s.
- Nator a Java/Swing application that makes use of Mailinator.com. It can grab email from Mailinator and mail it to an external email address. It can also create random usernames and monitor those accounts.
- FileNabber a web application (WAR) that will download remote files