# Amy Brennan codesaway@gmail.com

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#### **SUMMARY**

Outstanding Java Programmer and talented Software Engineer with eleven years of Java programming experience and proven expertise in the object-oriented programming paradigm, including designing, documenting, and implementing a script library in AutoHotkey that mimics OOP. Some of my skills involve the following:

- Skilled at building upon existing functionality through innovative techniques and automation
- Excels at explaining technical details in a manner business can understand
- Able to break down complex ideas and explain them in simpler parts0

#### **SKILLS**

OS / Database: Android, DB2, Linux, Oracle, SQL Server, Windows

Languages: C++, Groovy, Java, SQL, Visual Basic

Scripting: AutoHotkey (Windows scripting language), Lua, Powershell, Python

Tools: Google Guice, Guava, JDBC, Maven, Maven plugins, Regular Expressions
Automation: Apache POI (create / edit Excel files), WLST (WebLogic Scripting Tool)

XML: XML, XPath, XSLT, XML Schemas (XSD)

Testing tools: FEST Assertions / Hamcrest, Jakarta Cactus (server-side unit testing), JUnit 4

Certifications: HP SiteScope Certified (2011)

Applications: Eclipse, Java Applets, Jenkins, Netbeans, Nexus, StarTeam, SVN Web (front-end): CSS, EJB 2, GlassFish 2/3, HTML, JavaScript, Struts 1, WebLogic

#### **EXPERIENCE**

## Teacher Retirement System of Texas, Austin, TX

February 2014 – Present

Java Programmer IV

- Main Java developer in multi-year data migration project
  - Designed, developed and documented Java code which performed data verification, ensuring data was transformed and migrated correctly from our existing systems to the new line of business
  - Worked closely with business on data cleansing efforts, supplying business with reports and analysis to assist in data cleaning.
- Wrote SQL scripts to transform and verify legacy data in multi-year data migration project
  - o Created data necessary for new data model by transforming existing data
  - o Performed data reconciliation using SQL scripts to ensure migrated data correctly to new system
  - o Using SQL scripts, conditioning existing data to prepare it for migration
- Developed two Maven plugins for internal use to improve our build process
  - o The first outputs changed files between a project's SVN branch and trunk to an Excel file
  - o The second updates pom dependency versions for any projects updated as part of a release

# Teacher Retirement System of Texas, Austin, TX

September 2012 – January 2014

Java Programmer III

- Introduced automated integration tests to TRS's development life cycle using Cactus, JUnit and FEST Assertions for server-side unit testing of EJBs
- Refactored existing systems to decrease code base and improve performance and code maintainability
- Automated data validation during database migration from legacy databases to SQL Server

- Automated detection of data oddities in legacy data (to help prepare data for migration to SQL Server)
- Designed and developed Java code that profiles our existing data (to determine common formats, which are used as the baseline to detect data oddities)

#### Hewlett-Packard, Austin, TX

**January 2010 – August 2012** 

IT Developer/Engineer I

- Automated daily tasks via Java code that interacts with the servers I was responsible to support
- Interacted with Oracle Databases using JDBC and SQL
- Designed several Java libraries:
  - Automation framework to facilitate interaction with remote Linux and Windows computers
  - o MS Excel Files (2007+) ability to create and modify Excel files (\*.xlsx)
  - O Workflow manager orchestrates a series of tasks and subtasks, allowing an automated execution
- Enhanced Java's native XML DOM library designed a wrapper which adds additional functionality, including better handling of XML files which use namespaces

### CodesAway

**May 2009 – December 2009** 

Lead Programmer

- Started an online business features libraries and programs that I have developed to make writing code a little easier uses HTML, JavaScript, and CSS with XHTML 1.0 Strict specifications.
- Designed, documented, and implemented a Java library that extends Java regular expressions (RegExPlus); refactors unsupported syntax to an equivalent form, supported by Java's native pattern class
- Created a Java Applet that provides online regular expression testing using RegExPlus
- Designed, documented, and implemented a mathematical expression parser reads an infix expression and creates the resulting parse tree.
- Designed, documented, and implemented a Java utility class that simplifies interaction with the system clipboard

#### www.AutoHotkey.com Forum

**November 2008 – June 2009** 

Programmer

- AutoHotkey is an open-source scripting language for Windows with a large online community.
- Developed, documented, and implemented in AutoHotkey a script library that mimics OOP
- Designed, documented, and implemented in AutoHotkey a class library to extend menu functionality
- Designed, documented, and implemented in AutoHotkey a function that converts Pre-Vista paths in a string to their Vista equivalent when on a Vista computer.

#### **Self-Programmer**

**August 2004 – August 2005** 

RSA encryption

- Derived mathematical equations capable of describing multiplication properties relating to RSA encryption and factoring large numbers into their prime factors.
- Designed, documented, and implemented Java data structures capable of storing and manipulating the aforementioned equations.
- Designed, documented, and implemented in Java a BigRational class as an extension of Java's BigInteger class – allows working with fractions.

#### **EDUCATION**

University of Houston, Houston, TX - BS in Mathematics (Computer Science - minor) - December 2009

My focus was on data structures and algorithms, and understanding the abstract elements of computer science.