Deepalakshmi Thiagarajan

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Certified Professional Java SE 8 Programmer

Summary

- Over 5 years of experience in Java development
- Oracle Certified Professional Java SE 8 Programmer [December 2017]

Skillset

Programming Languages Java, Perl, Python

Java Technologies Spring, Hibernate, Apache Tomcat, JSP, Servlets

Web Technologies HTML, CSS, JavaScript

Mobile Technologies Android SDK

Database/storage Technologies Oracle, Apache Cassandra, MongoDB

Operating Systems, Networking & Tools GNU/Linux, Mac OS X, HTTP, DNS, TCP, IP, Wireshark, Git

Akamai Technologies Inc., Santa Clara, California

Senior Software Development Engineer in Test [September 2016 to present]
Software Development Engineer in Test II [June 2015 to September 2016]
Software Development Engineer in Test [June 2013 to June 2015]

- Responsible for developing automation test framework and creating automation test cases in Java for testing REST-based web services and web applications
- Involved in developing automation tests in Java for web applications using Selenium Web Driver
- Involved in performance testing of web applications using Scala and Gatling
- Also performed some basic security testing including testing for broken authentication and authorization, cross-site scripting, and SQL injection
- Mentoring and guiding new team members

Technologies: Java, TestNG, REST-Assured, Oracle, JDBC, Cassandra, shell scripting, Git, Jenkins, Gatling

Hackathon projects at Akamai

Recommendation System for Akamai Products [December 2017]: The system uses machine learning to understand the existing customer – product relationship and uses this to recommend new products to customers. The system was implemented based on user-based collaborative filtering using Apache Mahout in Java.

Android application: The application provides some functionality of Akamai's portal as a native Android application. It takes Akamai's custom {OPEN} authentication/authorization credentials from the user, makes REST requests to one of the available service endpoints, and displays the response to the user.

Web Engineer at Shutterfly, Inc., Redwood City, CA [February 2013 to May 2013]

Responsible for the maintenance of web application on Java EE stack using JSP, Servlets and Spring on the backend and HTML, CSS and JavaScript on the frontend. As part of my job, I was responsible for interacting with crossfunctional teams to add new products to Shutterfly website.

Intern at Akamai Technologies, Inc., San Mateo, CA [June 2012 to November 2012]

Responsible for the design and development of a text parser in Perl. The parser reads millions of URLs
present in input log files, identifies and isolates URLs satisfying specified criteria.

• Responsible for fixing, refactoring, and migrating test cases validating functionalities of Akamai Web Portal, from Selenium 1 to Selenium 2 (Web Driver).

Education and Certifications

- Master of Science in Software Engineering with Enterprise Software specialization at San Jose State University
 [August 2011 to May 2013]
- Master of Science in Managing Information Technology at Sullivan University [June 2015 to September 2016]
- Bachelor of Technology in Information Technology, Anna University, Chennai, India [August 2007 to May 2011]
- Oracle Certified Professional Java SE 8 Programmer [December 2017]
- Oracle Certified Professional Java SE 6 Programmer [February 2012]

Graduate Projects

- 1. **Development of an Android Application**: The application decodes and displays an advertisement when an appropriate QR-Code is scanned through the camera. The application consumes existing REST APIs to submit the barcode and retrieve a multimedia ad, and presents it to the user.
 - Technologies: Android SDK Camera, Phone, SMS and GPS APIs; REST Web Services
- 2. **Development of a Stock Prediction System**: The crawler component of the system gathered financial news and stock data. This data was processed, stored and indexed for search. Machine learning algorithms were used to predict stock prices and presented to the user.
 - Technologies: Java, Apache Nutch, Apache Solr, SolrJ, Apache Cassandra, Hector, Weka
- 3. **Development of Java web service client and server for a game of Tic-Tac-Toe**: The front-end exposed a board on which players can mark on their turns. The server maintained multiple sessions of pairs of players playing the game against each other, validated players' moves and calculated winners.
 - <u>Technologies</u>: Java, Java Web Services (JAX-WS), MySQL, JSP / Servlets, JavaScript
- 4. **Development of a Distributed Search Application on LAMP platform**: The application used Gearman distributed application framework to divide the task of crawling, searching and indexing among multiple workers, which are capable of executing their tasks concurrently.
 - Technologies: Gearman, Sphinx Search Server, Apache Web Server, MySQL, Linux and PHP
- 5. **Development of a RESTful web application for Social Networking:** The application enables users to sign up, add friends, send and receive private messages, and post microblogs. These functionalities were implemented following MVC pattern and as REST web services. The application consumes these web services.
 - Technologies: Ruby on Rails, REST, SQLite
- 6. **Development of a Multitenant SaaS Application**: This application was a Learning Management System designed to be used by different universities. Each university was a tenant and can customize the application for their users. The application was deployed in Amazon EC2.
 - Technologies: C#, MySQL, Amazon EC2
- 7. An Analysis of NoSQL databases and its Design Methodologies in Cloud and the development of a healthcare networking system: The first part of the project involved an analysis of performances of MySQL, MongoDB and Cassandra for different data operations. Based on these metrics, a Social Networking application was designed with polyglot persistence, developed using Java EE technologies and deployed on Amazon EC2. Emphasis was placed in building a suitable data model to efficiently store and operate on structured and unstructured data.

<u>Technologies</u>: MongoDB, Cassandra, MySQL, Java, REST, JSP / Servlets, CSS, JavaScript, JQuery, Amazon EC2