CALVIN H. LEE, B.Sc.

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HIGHLIGHTS

➢ Understand and practice in **Object-Oriented Programming** and **data structures**
➢ **10 years of solid software development experience (mainly in Java and Perl)**
➢ Proven experience in Agile methodology and eXtreme programming development
➢ Successful development in distributed systems of multi-tier web applications architecture
➢ Strong **fundamentals in algorithm design & enjoy solving problems**!
➢ Outstanding recommendations from former employers

TECHNICAL EXPERTISE

Languages	**Expert**:	Perl, Java (6/7/8), SQL (RDBMS: PostgreSQL, MySQL)
	Proficient:	X/HTML (4/5), C(#), CSS, JavaScripts (jQuery/Ajax), PHP, Python, XML, Bash
Concepts		Agile (Scrumban, XP), Concurrency, Serialization, OOD, Design Patterns, Big-O, MVC
System (OS)		Various Linux (Ubuntu/Fedora/Redhat), Mac OS X, Windows, Solaris (Unix) systems
Algorithms/DS		String/Bit, HT/S, Array/Linked/List, Map, Stacks/Queues, Tree/Heap/BST/BFS/DFS, Sort
Software		SVN/GIT, Jmeter, Selenium, Vi(m), Maven, Jconsole, Apache, Lucene, TT/Redis, Log4j
Atlassian		JIRA, Stash (Bitbucket), Confluence (Wiki), Bamboo, Fisheye (Crucible)

WORK EXPERIENCE

Sr. SOFTWARE DEVELOPER   **2012 July – *Present***
Global Relay Communications Inc., Gastown B.C.

➢ ***Message Archive Web Application (*** *Written in **Perl** with SVN repository**)*
  • Cloud service (SaaS) that our clients will sign in to see all different types of messages archived
  • Optimized code using profiler: search/render/process takes about x10 faster (120s -> less than 10s)
  • Wrote unit tests (using Test::*) for each modules/functions developed for Test Driven Development
  • Deep Knowledge in **SQL** is required to support multiple **Postgresql** servers with multiple databases
  • Provide easily adaptable (**RESTful** interface + **JSON**) APIs for mobile devices
  • Exposed heavily in working with different time zones and internationalizations/localizations
  • **TokyoTyrant** (NoSQL) key-value storage used for managing sessions

➢ ***Analyzer/Extractor/Seacher/Indexer*** *(Written in **Java** with GIT repository)*
  • Java-based (Multi-Threaded) component that parses and apply conditions for various types of MIME type EML and indexes them to be able to be searched by **Apache Lucene**
  • Fisheye used for integrating each other for code reviews, Stash used for managing the **GIT** source build via Bamboo automatically through **Maven** (2/3), managing those builds through Artifactory
  • Analyzer analyzes, Extractor extracts/displays. Searcher searches. Indexer indexes terms
  • 100% Test Driven Development, require unit tests for any new functions introduced. And reviewers are responsible for reviewing the cases covered for given functionality

- Practiced to write clean codes. pmd/checkstyle enforced. Write in class hierarchies to tagged ones
- **Redis** (NoSQL) key-value storage used for LRU caches of pages being displayed.

➢ *Importer (Written in **Perl** with SVN repository)*

- Perl-based in OO design (Moose) component that parses and apply various conditions for various types of MIME protocol. Code is extremely complicated. Able to handle all areas of functionalities
- Forked into 15 different processes for parsing and reading through the EML
- Extremely experienced in bash, and all other shell related things

SOFTWARE DEVELOPER   **2008 December – 2012 July**

Sentry Payments Services Ltd（Formerly Riverstyx Internet Ltd), Gastown B.C.

➢ *Secured Payment Gateway*

- Designed and implemented a secure **Perl**-based payment gateway application in OO design (native) meeting PCI DSS for 3 consecutive years (DB used: **MySQL**)
- Demonstrated and evaluated application security by attentively following Open Web Application Security Project (OWASP) Top 10 each year and WASC best practice documents on Web application security
- Strongly practiced eXtreme Programming / Agile methodology in a paired team

➢ *Processor Integration Framework*

- Designed and developed base framework used for integrating against different acquiring banks which resulted in alleviating development time by nearly 3 folds on average
- Protected sensitive data using encryption methods such as SHA and RSA and then communicating data in serialized form
- Delivered generalized testing tool for verifying whole transaction flow on a given processor

➢ *Web Service API*

- Designed and implemented 5 new web service APIs which allowed clients to integrate their system remotely to us
- Improved existing input validation by generalizing them into a common library and running pre-sanitization along with accepting known valids and rejecting known invalids

SOFTWARE DEVELOPER   **2007 January – 2008 October**

EQO Communications Inc, Richmond B.C.

➢ *Java 2 Platform, Micro Edition (J2ME, Mobile Development)*

- Implemented mainly on Canvas and UI related components for MIDP 2.0 and CLDC 1.1
- Enhanced existing usability for new releases meeting tight schedule deadlines

➢ *Reporting & Data Analysis*

- Developed reporting framework in OO design using internal cache for greater performance
- Collected and analyzed data using TokyoTyrant and SQLlite for management review each morning
- Parsed large sets of logs and other usage trails for further analysis and reporting

EDUCATION

Bachelor of Science in Computer Science   **2003 – 2007**

Simon Fraser University, Burnaby, B.C.

➢ Concentration in Software Engineering