Marco Villalobos

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Objective

Produce enterprise software applications that are critical to a company's monetization efforts. More specifically, I want to fulfill a senior role [architect, technical lead] in the production of software applications. I am also open to continuing my work as a remote developer, consultant, or full-time employee.

Experience

Gamblit Gaming, LLC Sr. Software Engineer / gaming November 2015- Present

Gaming Technology *Glendale, CA*

I developed software components for land-based table and cabinet regulated gaming systems. These were closed systems, with touch screens, bill validators, printers, that must interface with casinos via the Slot Accounting System (SAS) protocol.

- Provided architectural guidance in the development of RESTful systems that used Java, JDK 1.8, Spring Boot, Maven, thread-safe domain objects, data-access objects, services, dependency injection, transaction management with AOP, JAX-RS with Jersey, JSON serialization with Jackson, JDBC, unit testing, integration testing, Docker, Docker Compose, PostgreSQL, and Microsoft SQL Server.
- Implemented a command-line tool with Java and Git that analyzed a Maven project and checked out all its dependencies within the organization in the order that they must be built or tagged. This project leveraged Maven Aether and JGIt libraries. This essentially was a graphing problem that required a combination of breadth first traversal and depth first traversal.
- Solved many of the concurrency problems that were required for a functional product. I also used this
 opportunity to mentor the staff on good concurrency practices.
- Introduced and setup the Flyway database migration tool to organize how we manage our database.

Loot Crate

Sr. Software Engineer / eCommerce

Technology

April 2015- November 2015

Los Angeles, CA

Provided architectural guidance to transition from a single Ruby on Rails application that provides subscription and shipping services towards a distributed system. This includes surveying the key components in the system, accounting for performance and scalability problems, and recommending technical solutions.

- I developed database migration scripts to provide referential integrity and auditing functionality to a production PostgreSQL database. These migrations also fixed data anomalies.
- I developed high-performance multi-threaded ETL data extraction script that introspected 900,000 remrecords and locally persisted 7 million database records and uploaded 3.5 million files that accounted fo 73.3 GB in S3. This task used JRuby, Java threads, Java Concurrency, JDBC batch, Badger, and AWS.
- I implemented an internal Ruby GEM called "Badger" that simplified developing high-performing database batch programs. I compared "Badger" to an MRI Ruby application that took 18 hours to complete with Active Record versus JRuby with Badger that only took 15 minutes.

Overstock.com

Sr. Software Engineer / eCommerce

Consultant

October 2012- Present

South Pasadena, CA

I worked remotely as a consultant as a Sr. Software Engineer on a variety of Service Oriented Architecture projects. This includes developing and maintaining RESTful Web Services, batch processing systems, and web application development. Some of the more interesting tasks that I completed include the following:

- I helped our team develop custom SOA solutions, and also Mule SOA solutions. These solutions were mostly RESTful, and used Spring Boot, JAX-RS, and JPA.
- I developed stateless client Java libraries for HTTP REST, SFTP, and FTP. These were helpful for integration tasks within our SOA components.
- I developed Docker containers for the purpose of integration testing.
- I developed a RESTful distributed file system with Netty and Cassandra.
- I developed high-performing integration RESTful services that processed data payloads in the GB order range. It used HTTP streaming and database batching techniques to achieve a high throughput. This product leveraged Tomcat, JAX-RS, StAX, and JDBC.

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SupplyFrame Media

Lead Software Engineer / eCommerce

Technology

April 2011 - September 2012

Los Angeles, CA

I was Lead Developer of SupplyFrame Media's flagship e-commerce platform. This involves leading a small development team. Our team accomplished the following:

- Our team integrated external sites into our e-commerce platform. This project leveraged Tomcat, Struts 2, Spring, and PostgreSQL.
- Our team integrated full-text search capabilities with Lucene onto our e-commerce platform.
- I converted an existing dynamically linked API into a RESTFul Web API with JAX-RS.
- I wrote client server system with NIO, Netty, and Protocol Buffers.

The Rubicon Project

Senior Software Engineer / Display Ad Serving

Technology

November 2010-April 2011

Los Angeles, CA

I assisted in the technology transfer of the Fox Audience Network (FAN) Ad Server following the Rubicon Project's acquisition of FAN. I also lead the development of an "agile" technology for creating RESTFul integration services from database queries.

NewsCorp

Senior Java Software Engineer / Display Ad Serving

Monetization Group / Fox Audience Network

June 2007-October 2010

Santa Monica, CA

I was on a small team that developed and maintained a high-performance, optimizing display ad server that displayed at its peak 7 billion impressions per day. Highlights of my accomplishments include the following:

- Under the guidance of the system's architect and a performance developer, I lead the implementation, and supported a robust, mission-critical high-performance extract-driven data-import process responsit for aggregating all display ad impressions. Using concurrency programming and database batch programming techniques we were able to achieve approximately 2000 transactions per second.
- I assisted our team on our Ad Server (the most important and demanding component in our system) to implement 2nd Price Auction, and cookie encryption / decryption routines.
- I developed and supported the integration-web services that allowed for the MyAds and Publisher Network Portal products to traffic and manage ad campaigns on the FAN Ad Server.
- I lead the development, with an additional team member, of an XML data-import process that automate the creation of display ads. Using a combination of DOM, StAX, and JDBC batch programming, I was at to process 1 GB XML files in under a minute.

Senior Software Engineer / Social Networking Applications

Karaoke / MySpace

October 2006-June 2007

Beverly Hills, CA

I maintained an MVC web application with Social Networking and Karaoke as its distinguishing features. This project leveraged Tomcat, Struts, Spring, and MySQL. I integrated full-text search capabilities with Lucene.

Infospace [Office Closed]

Senior Software Engineer Consultant / Mobile Content Delivery

MoViSo

April 2006-October 2006

Los Angeles, CA

I was on a medium sized team that developed a media purchasing and delivery platform for mobile phones. I implemented the user provisioning system that allowed users to share content on T-Mobile's MyFaves product. This product leveraged Java, Servlet, Struts, and JDO.

Kaiser Permanente

Senior Web Developer Consultant

Consultant through Robert Half Technologies

Oct 2005-Feb 2006

Pasadena, CA

I maintained an internal web application that leveraged Java, Servlet, Struts, and JDBC.

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Oracle Corporation

Senior Principal Consultant

Staff Consultant

Aug 2005-Oct 2005

El Segundo, CA

I was on a small consulting team that performed on-site engagements. I assisted our client's team rearchitect under a Service Oriented Architecture.

BT

Senior J2EE Software Engineer / Consultant

Infonet

May 2004-July 2005

El Segundo, CA

I lead the adoption of open-source software and the Java Platform. I lead the development of distributed software systems that leveraged JBoss J2EE Application Server, EJB, JSF, MySql, Linux, CVS, and ANT.

VFT, Incorporated

Marketing and Web Development

Independent Consultant

April 2003-October 2003

Montebello, CA

I delivered user-interface prototypes for an e-commerce site that sold linen products.

Med Exec International

IT Consultant/Analyst

Independent Consultant

November 2002-May 2003

Glendale, CA

I delivered the requirements specification, with a complete set of Use Cases, functional requirements, non-functional requirements, and user-interface prototypes for a job board.

Gauss Interprise

Java Web Developer

Magellan / Open-Text

Irvine, CA

June 2000-October 2001

I lead the development of two Java Applets that were part of a complete Document Management solution. I leveraged AWT, and socket programming. I joined during a transitional period in which teams just started learning the Java technology stack.

Exist Corporation

[Company Out of Business]

Software Engineer

January 2000-June 2000

Santa Monica, CA

Maintained and developed an e-commerce system utilizing JSP, Servlet, and JDBC.

Sarnoff Legal Technologies

Java Developer Consultant
November 1999-January 2000

Independent Consultant

Irvine, CA

I delivered a time-tracking Java applet. I leveraged Java, AWT, JDBC, and Microsoft SQL Server.

NexGen SI

Associate Client Server Developer

Staff Consultant

April 1999-August 1999

Irvine, CA

Trained as a consultant and developed Visual Basic prototypes.

Unisys Corporation

Software Co-op May 1998-April 1999 Staff Intern

Mission Viejo, CA

I was an intern developing web applications with Cold Fusion.

1996-1999

University of California Irvine

B.S., Information and Computer Science

1992-1995

Pasadena City College

Associates of Arts

Education

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Skills

Java, EJB, JDBC, JPA, JSP, Servlet, JAX-RS, JAX-WS, Web Services, REST, JSON, Jersey, Jackson, JAAS, Concurrency Programming, Thread Safety.

The Spring Framework, Spring Boot, Spring Security, and AOP.

Docker, and Docker Compose.

Hadoop, Cassandra, HBase, Map Reduce, and DynamoDB.

SQL, Oracle, DB2, MySQL, and PostgreSQL.

Cloud Computing, Distributed Computing, EC2.

Ruby, JRuby, and Ruby on Rails.

HTML5, Angular 2, JQuery, Bootstrap, and Handlebars.

Linux, bash, awk, and I occasionally write with PERL.

Git, Subversion, and CVS.

Requirements capture with Use Cases, UML modeling, and Software Engineering.

Agile, Scrum, and Stories.

Verbal, written, and group presentations

Affiliations

Los Angeles Java Users' Group President

May 2004-Present

[Volunteer]

Non-Profit Organization Los Angeles, CA

I have managed the Los Angeles Java User's Group since 2004. This involves choosing relevant technical topics, finding presenters, assuring that we have a meeting location, hosting and moderating the meeting, promoting relationships between attendees and recruiters, and maintaining the website.

Delivering Quality Software with Modern Unit Testing Techniques

Presentations

- Tips in Concurrency
- Persistence with JPA 2.1Get there Faster with JRuby and JRuby on Rails
- RESTFul JSON Web Services with Jersey & Jackson
- Java Concurrency