# **Douglas Michael Estep**

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Online Resume: <a href="http://www.dougestep.com/">http://www.dougestep.com/</a> Technical Blog: <a href="http://dougestep.blogspot.com/">http://dougestep.blogspot.com/</a> GitHub Page: <a href="https://github.com/dgestep/">https://github.com/dgestep/</a>

**Objective** To join a company where I can apply 20+ years of experience as a Software

Architect and Developer to help grow the organization both internally and

externally.

**Education Ohio University**, Athens, Ohio, 1991

Bachelor of Science, Computer Science

Graduated Cum Laude

Additional Training **IBM:** Websphere Process Server I & II **The Middleware Company:** J2EE Patterns

### Technologies Java Model View Controller (MVC) Technologies

Model	Java, Spring JDBC, Spring Aspect Oriented Programing (AOP), Spring Inversion of Control (IoC), Enterprise Java Bean (EJB 2.0, EJB 3.0), Java Messaging Service (JMS), IBM MQ Series
View	JavaServer Pages (JSP), Expression Language (EL), JavaServer Pages Standard Tag Library (JSTL), JavaScript, Twitter Bootstrap, AJAX, JQuery, JQuery UI, Angular JS, Responsive Design, HTML, DHTML, Cascading Style Sheets (CSS)
Controller	Struts, Stripes, Java Servlets, Spring MVC

### Java Client Side

Java Swing, Java Applets, Jasper Reports.

### Java Extras

Gradle, Another Neat Tool (ANT), Google Protocol Buffers, Eclipse IDE, IBM Rational Application Developer (RAD) IDE, Proficient in Test Driven Development (TDD) using JUnit, Mockito, JMockit, Java Swing, Java Applets, Jasper Reports, Android.

## **Version Control System**

GIT, GitHub, SourceTree, SVN, CVS, Team Foundation Server, IBM Rational ClearCase, IBM Rational Team Concert, StarTeam

### Adobe Technologies

Adobe LiveCycle Form Server, Adobe Reader Extension Server, Adobe LiveCycle Designer

### **Application Servers**

IBM Websphere, Apache, Apache Tomcat, JBoss EAP 6, Oracle Weblogic, Resin

#### **Databases**

DB2, Oracle, MySQL, H2, MongoDB, JDO, DataNucleus, Microsoft SQL Server , CINCOM SUPRA

### **Micro Services**

OSGi, BndTools, Apache Felix

## Microsoft Technologies

.NET Framework, C#, Visual Basic .NET, ASP, Windows Application Development using C#.

### Other

Machine Learning, Deep Learning, Autonomy, Continuous Integration, Jenkins, Stash, IBM Websphere Process Server v7.x, IBM MQ Workflow, IBM Content Manager, IBM Tivoli Access Manager, CA SiteMinder, iText, REST, Object Oriented Programming, XML, Powerbuilder, C++, MANTIS, COBOL, Ubuntu Linux

## **University of Dayton Research Institute 2015 - Present**

Senior Software Engineer – Sensor Systems Division Tech Lead

OSUS (Open Standard for Unattended Sensors)	Enhanced and maintained OSGi services and plugins which read and acted on data read from various sensors.  Technologies: Java, OSGi, BndTools, Apache Felix, H2 database, MongoDB.	
AMASE (AVTAS Multi-agent Simulation Environment)	<b>Technologies:</b> Java, OSGi, BndTools, Apache Felix, H2 database, MongoDB.  Enhanced and supported the AMASE application, which is simulation software that provides a basic simulation environment for the demonstration and testing of UAV control technologies. <b>Technologies:</b> Java.	
Substitute Professor - Computer Science	Provided substitute teaching for the CS150 and CS151 courses, which taught beginning Java.	

# Cincinnati Financial Corporation 2013 - 2015

Architect

My role at Cincinnati Financial was to move the software develop process to a level that reflected current technologies and best practices. This involved the following:

- · Promoted Responsive Design technologies, such as Twitter Bootstrap, for mobile front end use.
- Promoted single page application design using JavaScript technologies such as Angular JS and/or jQuery plugins.
- Introduced and implemented test driven development.
- Designed a loosely coupled software architecture, which drove a layer of abstraction between the View, Controller, and Model in a MVC design.

Along with my architectural practices, I also designed and developed the following applications:

EMS (Event Management System)	EMS (Event Management System) Architected and developed a publisher/subscriber service which was used at an enterprise level to communicate messages to/from applications within the corporation.	
	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, Oracle Weblogic, IBM DB2.	
Sales Dashboard for Mobile use	Presented a mobile friendly, responsive design dashboard application for the sales department, which presented prospective customer information, sales proposals, marketing materials, and active work tasks all by agency.	
	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, Twitter Bootstrap, CSS, JavaScript, JQuery, AJAX, EL, JSTL, Stripes, Oracle Weblogic, IBM DB2.	

Loss Control application for mobile use	Architected and developed a mobile friendly, responsive design application for the loss control department which presented risk evaluation information relevant for either a policy renewal and/or a new business submission. The application interfaced with the workflow system, agency management system, and other policy administration systems to pull in all
	relevant information and present the necessary forms to the field representative. Upon completion of the evaluation, the application interfaced with the document management system to store the end result plus any supporting files.
	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, Twitter Bootstrap,

## Liberty Mutual Insurance 2005 – 2013

Component Architect & Principal Software Developer

My role at Liberty Mutual is a Principal Software Developer, which is synonymous to a senior software engineer or an application architect. I architected, designed, and developed the following new products, services, and web applications for Liberty Mutual Insurance. Each product was developed with a high level of quality in mind. I used test driven development (TDD) for these projects, using JUnit to create my test suite. Each of these products was developed by me. They involved database design, including the creation of indexes and enforcement of referential integrity in order to achievement maximum performance results. Each product provides extensive inline/API documentation for ease of reuse and maintainability.

Commercial Lines Work List	An internal workflow web application servicing all commercial line underwriters within Liberty Mutual. This application streamlines all processes within the commercial line department and provides underwriters the ability to work, route, transfer, and create additional work items. This application is very well received and presents a very nice web 2.0 interface. Compatible with all major browsers.  Technologies: Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, CSS, JavaScript, Jquery, Jquery UI, AJAX, EL, JSTL, Stripes, IBM Websphere, IBM DB2 (both mainframe and distributed), IBM MQ Workflow, Websphere Process Server, IBM Content Manager.
Commercial Policy File (CPF)	An account-centric internal web application, servicing all commercial line underwriters within Liberty Mutual. This application provides underwriters the ability to query all files attached to accounts, query and add account notes, view active Workflow work items for an account, as well as many other various informational screens about an account. This application is very well received and presents a very nice web 2.0 interface. Compatible with all major browsers.  Technologies: Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, CSS, JavaScript, Jquery, Jquery UI, AJAX, EL, JSTL, Stripes, IBM Websphere, IBM DB2 (both mainframe and distributed), IBM MQ Workflow, Websphere Process Server, IBM Content Manager.
Common Model Library	An internal library containing business logic for all of Liberty Mutual's commercial lines applications and services. This project provides a repository for common business logic that can be reused throughout multiple projects and resolved the problem of code duplication and business logic duplication that was plaguing the legacy applications.  Technologies: Java, Spring JDBC, Spring AOP, Spring IoC, IBM DB2 (both mainframe and distributed), IBM MQ Workflow, Websphere Process Server, IBM Content Manager.
jQuery Panels Widget	jQuery Panels is a user interface jQuery plugin that utilizes the widgets provided by the jQuery UI open source project to present entry points (or windows) into the server data similar to portal technology. All interaction with Panels is done so using AJAX technology, backed by the jQuery library. The Panels plugin allows for extensive customization, providing many points in which client applications can plugin in custom functionality and UI behavior specific to their needs. The plugin uses jQuery and CSS style sheets to dress up

the panel content with a uniformed look and feel allowing the developer of the panel to
focus solely on the functionality and less on the UI.

## **Ohio Casualty Products**

Ohio Casualty was acquired by Liberty Mutual in 2007. Prior to the acquisition, I served as a component architect and I architected, designed, and developed the following new products / components.

Bond Execution System Technology (BEST)	Insurance Surety Bond customer facing web application which allows insurance agents to search and issue Surety Bonds. BEST is a large scale high performance system, servicing agents within the continental United States and abroad. It achieved an ROI within the first year of use and contributed to a department that was the most profitable department in the company. This project won the President's award for its ease-of-use, agent-feedback, and ROI. Compatible with all major browsers.  Technologies: Java, JDBC (uses the JADA product I developed and the Form Manager web service discussed below), JSP, HTML, CSS, JavaScript, Struts, IBM Websphere, IBM DB2 (both mainframe and distributed), IBM Content Manager, IBM MQ Workflow, Adobe LiveCycle Forms, Adobe Reader Extension Server.
E-Label web service	An internal and reusable print service component which allowed Ohio Casualty personal lines policy administration system to produce online and real time insurance forms populated with the policy information. This service sits on top of the Form Manager service (discussed below).
	I presented this technology at the ACORD user conference (2007) in Orlando Florida. It was very well received.
	<b>Technologies:</b> Java, Struts, Adobe LiveCycle Forms and Adobe Reader Extension Server.
Form Manager web service	An internal and reusable form service component which allows systems to store, query, populate, and produce their various online forms using Adobe PDF technology.
	<b>Technologies:</b> Java, JSP, Struts, DB2, IBM Content Manager, Adobe LiveCycle Forms and Adobe Reader Extension Server.

### Java Instructor

In addition to the above, I also was instructor for the following courses held internally at Ohio Casualty.

Beginning Java	Focused on converting legacy developers into Java developers. It covered the	
	Java language as a whole as well as object orientation principles.	
Advanced Java	Covered J2EE and web technologies such as HTML, JavaScript, and JSP and	
	java servlets.	
Struts	An introductory course focusing on the STRUTS Java framework.	

# **Independent Consulting 2001 - Present**

Software Architect & Developer

While working full time, I have maintained a side business writing software for small businesses and individual entrepreneurs. I architected, designed, and developed the following new products for clients (as well as myself).

Carpe Diem	A private social networking and photo sharing web site similar to Facebook and Twitter.	
	Will demo on request. Compatible with all major browsers.	
	Currently authoring a book about this project and the technology behind its success.	

	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, CSS, JavaScript, JQuery, JQuery UI, EL, JSTL, Stripes, Tomcat 7 and/or Maven, MySQL 5.x.	
Omega Pro	A Java Swing application which managed the pet cemetery business. This suite of applications manages the burials and cremations for pets, the plots, the billing and invoicing, accounts receivable, and a product catalog.	
	Will demo on request.	
	<b>Technologies:</b> Java Swing, MySQL 5.x, Jasper Reports.	
JADA (Java Abstract Data Access)	A Java-based persistence framework that handles database transactions, allowing the developer to easily separate the low-level persistence code from the business objects. Predated popular ORM's such as Hibernate.  Technologies: Java.	
Safety Net	A Windows application, written in C#, which allows users to build backup scripts for	
	backing up their file system. The application took advantage of robustness and power of the RoboCopy Windows tool.	
	Technologies: C# .NET.	

# jQuery Plugins That I've Developed

I've developed several open source jQuery plugins. These plugins are offered on my web site  $(\underline{\text{http://www.dougestep.com}})$  as well as the official jQuery plugin registry site.

http://plugins.jquery.com/pane/	A jQuery UI widget which allows you to present entry points (or windows) into your data that can be served up from a server action or from static HTML (similar to a portlet in portal technology). Backed by jQuery's AJAX libraries, each pane acts independently from other panes achieving a clear separation of concerns between user actions.
http://plugins.jquery.com/mod-	A jQuery widget that you can use to keep track of input-able
<u>highlighter/</u>	values within a container and highlight those columns that have
	been modified. Allows modified columns to be reset to their
	original values.
http://plugins.jquery.com/disabler/	A jQuery widget that can completely disable or present a read-only
	view of the content on your page

## Public Web Sites That I've Developed

Using my side business, I have developed numerous web sites for small businesses. Below are a few of my favorites.

http://www.gwenestep.com/	A self-taught, on-location, lifestyle photographer located near
	Dayton, Ohio with a passion for capturing life's precious moments
	Technologies: Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML,
	CSS, JavaScript, JQuery, JQuery UI, EL, JSTL, Stripes, Tomcat 7 and/or
	Resin, MySQL 5.x.
http://www.myquestchurch.com	Simple web site for a local church which allows the church to
	author their own pages.

	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, CSS, JavaScript, JQuery, JQuery UI, EL, JSTL, Stripes, Tomcat 7 and/or Maven, MySQL 5.x.
http://www.dillhofffinancial.com	Dillhoff Financial is a full service independent financial services firm specializing in Stocks, Bonds, Mutual Funds, Life Insurance Analysis, Debt Management, Spending Plans (Budgeting) Charitable Giving Strategies.
	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, CSS, JavaScript, JQuery, JQuery UI, EL, JSTL, Stripes, Tomcat 7 and/or Maven, MySQL 5.x.
http://www.tricktrucknrod.com	Trick Truck N Rods is a business that specializes in restoring old Chevy and GMC trucks, as well as buying and selling vintage trucks.
	<b>Technologies:</b> Java, Spring JDBC, Spring AOP, Spring IoC, JSP, HTML, CSS, JavaScript, JQuery, JQuery UI, EL, JSTL, Stripes, Tomcat 7 and/or Maven, MySQL 5.x.
http://www.eliteexp.com	Elite Expediting is a full service courier company serving the central Ohio area.
	<b>Technologies:</b> Java, JDBC (uses the JADA product I developed), JSP, HTML, CSS, JavaScript, Struts, Tomcat 7 and/or Maven, MySQL 5.x.

# Workflow One 2001 – 2005 (FKA the Relizon Company)

Senior Application Developer II

I architected, designed, and developed the following new web application for the Relizon Company.

SIMON (Simple Information Management Online)	A web-based content management system designed to manage the content on an Intranet.
	<b>Technologies:</b> Active Server Pages (ASP), HTML, CSS, JavaScript, IIS, SQL Server.

Enhanced and supported Relizon's customer facing order management web application. Some of my key accomplishments:

- Search Engine. Redesigned and rewrote the existing search engine within Relizonline. My implementation involved an extensive indexing process that allowed for quick and accurate search results through millions of records, eliminating the latency experienced by the users.
- *B2B module*. Redesigned and rewrote the existing Business-to-Business module, resulting in no B2B production issues being reported and excellent system performance. Prior to the rewrite, the B2B module was continually failing with timeout issues when large orders were sent during heavy load time. The B2B process takes advantage of the JADA package that I created.
- Budgeting Module. Designed and developed a budgeting module which allowed our customers to create budgets for their users to spend. The module would stop the user from ordering past their budget.
- Broadcast Order. Designed and developed a module which allowed Relizonline users to place an order and ship the order to a group of shipping addresses.

## Consulting Services 1991 - 2001

Software Engineer

For the first 10 years of my career I focused on consulting services. I worked for several mid-sized to small software consulting companies. The last company that I worked for was a company that I helped start (Gemini Software Solutions). I developed the following new product for Gemini Software Solutions.

TranSend	An Active X control that allowed external Windows applications to call COBOL processors within
	CINCOM Control Manufacturing (an ERP/MRP package). CINCOM Control Manufacturing was a
	closed system. This Active X controlled bridged the gap between online web applications and/or
	Windows applications and CINCOM Control Manufacturing.
	Technologies: Visual Basic 6.

### 1991 - 1998

- Participated in the development of an ERP / MRP web enabled package for small to medium sized businesses, called Converge. The front-end screens for Converge were written in Active Server Pages for the Internet Explorer browser. The back-end COM objects were written using Visual Basic 6.0. Converge utilizes the SQL Server 7.0 database.
- Served as a technical team leader for Jireh Consulting and Regent Systems Inc. doing consulting work for numerous projects involving Visual Basic, Powerbuilder, COBOL and MANTIS programming.
- Served as a developer for BASS and participated on the team to develop the BASS MerchaNT system, a client-server application providing a Windows NT compliant GUI interface. MerchaNT is a back office system for in-store management of a grocery store. The interface was designed using PowerBuilder 5 and Microsoft Visual C++. The database was SQL Anywhere and resided on a server and was accessed over a LAN using the PowerBuilder native communications.
- Worked as a consultant for RJO Enterprises. I participated in the development of the Defense Integrated Subsistence Management System II (DISMS II) project. Development of the DISMS II project was done using MANTIS, COBOL, and SUPRA.

**My Web Sites** My Resume Site – http://www.dougestep.com

The Doug and Gwen Times – http://www.dougandgwen.com

MilitaryOhio Army National Guard (1987-1993)ExperienceSergeant E-5 - Heavy Equipment Mechanic