

# Peter Swartwout

## Enterprise Application Developer Greater Pittsburgh Area (open to travel)

### **Owner, Artisan Solutions, LLC**

Pittsburgh, PA 15228

[www.linkedin.com/in/pswartwout](http://www.linkedin.com/in/pswartwout)

Put my 20+ years of development experience to work on your next web application, internal modernization, SOA or ESB orchestration, or any other project you have in mind. I will collaborate with you on the best architecture and solution. I am a very good listener.

Agile is in my blood. I will prove to you that it works when properly applied.

If you are an employer with a senior-level contract job to fill, consider hiring me directly, through my consulting firm, Artisan Solutions. I am also available as a sub-contractor to reputable consulting firms.

## Core Competencies

**Java Enterprise Architecture.** I love building high-performance web applications with Spring, Hibernate, and open-source technologies. I do internal modernization projects. Integrate existing applications with ESB, BPM, and SOA. Let's talk about the many possible solution stacks.

**Ruby on Rails.** Rapid application development and hosting. Perfect for startups. HTML5, CSS, Javascript. Built-in REST and routing. Rspec for testing. AWS and/or Heroku to deploy.

**Microsoft .NET Development.** Rapid application development in Visual Studio 2010 and SQL Server. Web application development with ASP.NET MVC 3.

**Team Leadership.** Demonstrated ability to lead teams from start to finish on complex projects with short schedules. Can contribute in multiple roles, including PM, architect, tech lead, training and mentoring.

**Agile Development.** Proven track record of delivering superlative results using agile practices such as backlog development, scrum, kanban, and continuous integration, with heavy reliance on unit-testing. I can lead sprint planning meetings and retrospective meetings.

**Communication.** Equally at ease talking to business people about requirements or developers about code. Expert documenter who consistently receives praise for my writing ability.

## Recent Employment History

### **Senior Technical Consultant**

#### **Summa Technologies**

*Pittsburgh, PA*

*2009 - 2013*

Complete employment history follows project history.

## Project History - as Artisan Solutions

### **FedEx Ground**

#### *Automated Work Area Design (2014-present)*

- Analyzed compute-intensive map maintenance processing and made many optimizations, improving overall performance by 2x - 10x.
- Improved and expanded Flex-based testing framework to improve client-side test coverage. (ongoing at present)
- Developed on Windows with Eclipse, FlashBuilder 4.6, Oracle SQL Developer. Deployed on Weblogic 11.
- Technologies used: Java 6, Flex 4.6, ActionScript 3, Python, Spring 3.0, Spring MVC 3.0, Hibernate 3, Maven, PL/SQL, Oracle 11g, Hudson CI

## Project History - with Summa

Projects are organized by client, most recent first.

### **PNC Bank**

#### *Treasury Management Development Lead (2013-present)*

- Implemented a stand-alone Identity Provider in PNC's PINACLE suite of 40 corporate banking services. This improves the reliability, stability, and maintainability of the entire application.
- Developed a new authentication API, to provide password, token, and MFA services.
- Refactored and consolidated thousands of lines of legacy code.
- Provided technical direction and process advice to IDP team and many PNC developers.
- Developed on Windows with Eclipse and Websphere 7. Deployed on Websphere 7.
- Technologies used: Java 6, Spring 3.0, Spring Security 3.0, Spring MVC 3.0, Spring Integration 3.0, SAML 2, MyBatis, Apache Ivy, Oracle 11g, Oracle SQL Developer, Liquibase, Jenkins CI, Mockito

### **BodyMedia**

#### *Writable Data API (2012)*

- Developed a RESTful API to expose BodyMedia's immense database of human body statistics to authorized users and third-party partners.
- Fully writable and readable, the API can support flexible, widget-based UIs.
- My role was project manager, team lead, and coder on a team of five developers.
- This was a fully agile project, including Scrum, Sprints, sprint planning and retrospective meetings
- Developed on Windows 7 with Eclipse and Tomcat 7. Deployed on Tomcat 7.
- Technologies used: Java, JAX-RS 2.0, Jersey, Spring 3.0, Hibernate 3.1, Oracle 10g, Oracle SQL Developer, Ehcache 2.6, Bamboo CI, Confluence, Jira, Trello, Postman

### **Think Through Learning**

#### *Think Through Math web application (2012)*

- Contributed features to TTM's award-winning online math training application.
- Researched and implemented continuous integration with Jenkins on Ubuntu platform.
- Developed on Max OS X with RubyMine 4. Deployed on Heroku.
- Technologies used: Ruby on Rails 3.1, Ruby 1.9, Heroku, RubyMine 4, Jenkins CI, Confluence, Jira, Pivotal Tracker, Capybara

### **University of Pittsburgh Medical Center (UPMC)**

#### *IHE Interoperability Project (2012)*

- Delivered the first leg of IHE\* interoperability between UPMC and Heritage Valley Health System
- Built inbound and outbound transactions to transmit documents in HIE XDS.b format

- Developed mediation flows in IBM Integration Developer
  - Integrated with Java-based JAX-WS endpoints
  - Developed on Windows 7 with WebSphere Integration Developer 7. Deployed on WebSphere Process Server 7.
  - Technologies used: WebSphere ESB, WebSphere MQ, JAX-WS, MTOM, HIE XDS.b
- \*Integrating the Healthcare Enterprise (<http://www.ihe.net>)

#### *MedTrak On-Call Assessment and Redesign (2012)*

- Conducted in-depth analysis of existing OnCall system
- Provided design and estimates to help UPMC move MedTrak OnCall to new platform: .NET 4, ASP.NET MVC 3, Oracle database, Java web services
- Web Services were to be moved from .NET (and SQL Server) to WebSphere Process Server (and Oracle)
- Technologies used: .NET 4, ASP.NET MVC 3, Oracle 11, SQL Server 2004, WPS 7

#### *Statewide Immunization Information System (2009)*

- Designed and developed an immunization information query service integration using the HL7 standard and Pennsylvania's PA-SIIS service ([www.health.state.pa.us/pasiis](http://www.health.state.pa.us/pasiis))
- Supplies patient immunization data to existing business processes
- Orchestrates business processes with BPEL
- Leverages existing software assets with WebSphere Transformation Extender
- Deployed in WebSphere Process Server
- Mentored UPMC staff on design and development practices
- Technologies used: WPS 6, IID 6, WTX, BPEL, WebSphere MQ, HL7

### **American Eagle Outfitters**

#### *Runtime Profiling and Performance Evaluation (2012)*

- Evaluated WebSphere Application Server 7 configuration
- Conducted in-depth performance analysis of mission critical third-party software running on WebSphere Application Server
- Provided recommendations for configuration improvements and software optimizations
- Technologies used: YourKit Java Profiler 11, IBM WebSphere PMI, IBM WebSphere Application Server 7

### **Tarkett**

#### *Tarkett Mobile (2012)*

- Integrated Salesforce.com documents with iPads in the field.
- Created synchronization middleware in .NET to synchronize Salesforce content on the mobile device
- Exposed REST services through WCF
- Implemented single sign-on (SSO ) to Salesforce using OAUTH 2
- Technologies used: .NET 4, C# 4, ASP.NET MVC 3, Entity Framework, REST, WCF, Visual Studio 2010, SQL Server 2008, Windows Server 2008, Salesforce.com API, OAUTH

#### *SAP Integration (2011)*

- Created middleware to transition existing web applications to SAP
- Constructed mediation flows in BizTalk to minimize impact on the portal during the SAP transition period
- Technologies used: BizTalk 2010, C# 4, .NET 4, SQL Server 2008, Rally

### **CIGNA**

#### *MailRx Mail-order Pharmacy (2011)*

- Supervised the transfer of ownership of mail-order pharmacy source code from an external vendor to CIGNA
- Constructed and documented the development environment
- Reduced overall costs and increased staff efficiency with numerous "quick win" enhancements

- Mentored CIGNA staff on agile development techniques like online code reviews, continuous integration, and unit testing
- Technologies used: C, Java 5, JBoss Application Server 4.3, AIX 5.3, Sybase 15, Rally, Jira, Bamboo, Fisheye/Crucible

### **Highmark Blue Cross Blue Shield**

#### *Reports@Hand Producer entitlements (2010)*

- Provides fine-grained administrator control over external user access to customer data
- Affiliates external producers with brokerages, Highmark customers, and Highmark products
- Technologies used: WebSphere Application Server 6.1, Rational Application Developer 7.0, Java SE 5, Spring Framework 3.0, Java ServerFaces 1.1, Oracle 10g, Oracle SQL Developer

### **University of Pittsburgh School of Medicine**

#### *Online application modernization (2010)*

- Provided a unified online application process for all graduate programs
- Significantly enhances the application process in the areas of:
  - Application screening
  - Interview scheduling
  - Recommendation process
  - Administrator functionality
- Technologies used: .NET 4, C# 4, ASP.NET MVC 2, Microsoft Visual Studio 2010, SQL Server 2008 R2, LINQ to SQL, Castle Windsor 2.5, JQuery 1.3, jQuery UI 1.8, Javascript, CSS 2, HTML 4, log4net, Ankh Subversion 2.1

### **M\*Modal**

#### *Business Process Management (BPM) Technology Evaluation (2010)*

- Enabled line-of-business decision-making around BPM and workflow within R&D
- Provided in-depth evaluation and prototyping of JBoss jBPM v4.3 and Drools Flow v5.0
- Researched and prototyped SAML, WS-Trust, and OpenID SSO approaches
- Provided direction for the client's Single Sign-On strategy
- Technologies used: jBPM 4.3, Drools and Drools Flow 5.0, SAML, WS-Trust, OpenID, SOAP web services, RESTful web services, JBoss 5 Application Server, JBoss-WS, JBoss PicketLink SSO stack, Shibboleth SSO stack, Java EE 5, Java SE 6

### **Salesforce.com Integrations**

#### *Tarkett Customer Projects (2012)*

- Enhanced UI for managing collections of products for customer projects
- Technologies used: Salesforce.com API, Salesforce.com Eclipse plugin

#### *Tollgrade Fourth Shift (2010)*

- Developed web service integration between Tollgrade Fourth Shift data and Salesforce.com
- Automated creation of new order header and detail records from Fourth Shift data
- Nightly batch integration between SQL Server and Salesforce.com
- Technologies used: Salesforce.com API, SOAP web services, SQL Server, Java SE 6

#### *PLS Logistics Credit Flag Web Service (2010)*

- Delivered web service integration layer between PLS Logistics back end and HarvestGold AJAX front end to Salesforce.com
- Enables PLS Logistics to offer a new credit flag service to their customers in Salesforce.com
- Technologies used: Oracle WebLogic Server 10, Oracle 10, SOAP web services, JavaEE 5



## Project History - prior to Summa

### **Customer Pickup Coordination**

***FedEx Ground, 2008 - 2009***

***Web-Tier and Middle-Tier Developer***

Senior J2EE developer for Release 3 of FedEx Ground's Customer Pickup Coordination System. The CPC is an SOA that greatly simplifies the package pickup process, saving time and money for managers, customer service reps, and drivers on the road. Utilizes TIBCO message broker technology to integrate diverse platforms including AS/400, J2EE on Linux, and .NET on Windows Server.

Together with a medium-sized team, (8 developers) I built JSF pages, business logic, and web services.

Spring Framework, Spring-WS, JAXB, XML Schema, JavaServer Faces (JSF), ICEfaces, AJAX, Facelets, Oracle, DB2, TIBCO MessageWorks.

Built with MyEclipse 6, will be deployed on BEA WebLogic 9 application server.

### **Pickup Zip Code Database (PZD)**

***FedEx Ground, 2007 - 2008***

***Middle-Tier Developer***

Led the middle-tier development of a Spring application that is now in production across North America. This app maintains postal code parameters critical to correctly booking package pickups, reducing pickup timing errors and greatly increasing same-day package pickup which directly flows to FedEx's bottom line.

Administrators can search and edit zip code parameters using a browser-based web tier. SOAP web services integrate with the package pickup system. Nightly processing keeps the PZD zip code data current.

I designed and coded the business logic, database access, Spring configuration, web services, PDF generation, and Quartz job processing.

Spring Framework, Spring-WS, JAXB, XML Schema, JavaServer Faces (JSF), ICEfaces, AJAX, Facelets, Oracle, DB2, Quartz (job scheduling), iText (PDF creation).

Built with MyEclipse 6, deployed on BEA WebLogic 9 application server.

### **Medicare Advantage Pre-Enrollment System (MAP)**

***Highmark BCBS, 2006 - 2007***

***Architect, Technical Team Leader***

This tremendously successful intranet application completely revolutionized the process of Medicare Advantage enrollment at Highmark, automating many processes previously done manually. Provides cost savings to customer service and back office research operations. Supports at least 500 concurrent users. In production since October 2007, the users love it and the developers find it easy to extend.

I was the chief architect and overall technical leader. I led a team of seven developers, three of whom were new to Java. In addition to challenging requirements and an aggressive schedule, this project was a pilot for RUP within Highmark.

JavaServer Faces (JSF), Hibernate, Oracle, DB2, JMS/MQ, SFTP, Clear Case, RAD, Clear Quest, and ReqPro.

Built with RAD and other IBM tools, deployed on WebSphere 6 application server.

### **Quality Blue Provider Portal**

***Highmark BCBS, 2005 - 2006***

***Architect, Technical Team Leader***

Reporting application for use by physicians and physical therapists who access it across an extranet. Provides secure access to Highmark's database of quality performance metrics for reporting purposes.

Led a team of five. This app was built very quickly using an agile approach with heavy emphasis on unit-testing.

JavaServer Faces, Jakarta POI for creating Excel spreadsheets on the fly.

Deployed on Highmark's intranet and NaviNet extranet with WebSphere 6.

### **Medicare Part D Enrollment System**

***Highmark BCBS, 2005***

***Architect, Technical Team Leader***

Provides self-enrollment capability to Medicare beneficiaries wishing to enroll in Part D. Uses Struts, Oracle, and a JMS integration to legacy WebSphere MQ Workflow.

Led a team of two. This app was built very quickly using an agile approach with heavy emphasis on unit-testing.

Deployed on the Internet with WebSphere 6 and SSL.

### **Linx Service Broker**

***Fiserv, 2004 - 2005***

***Architect, Technical Team Leader***

This company-wide initiative promoted efficiencies by integrating applications across Fiserv business units.

Senior technical resource representing Fiserv SourceOne in the integration effort. Member, Message Set Working Group, which set direction for the XML messaging used.

Led a team of three developers and three business analysts to create a WS-I compliant J2EE web services node for Fiserv SourceOne. Utilizes existing LMS technology. (see below) SOAP web services, XML Schema, JAXB, WSDL.

Deployed to the Fiserv intranet with WebSphere 5.1 on Red Hat Linux.

### **Linx Message Service (LMS)**

***Fiserv, 2001 - 2005***

***Designer, primary coder***

This mission-critical application revolutionized Fiserv's integration strategy for its clients. Previously closed mainframe applications became available to their banking clients, increasing per-transaction revenue from existing clients and helping to attract new ones.

I was the technical leader and primary coder of this highly-optimized XML-based servlet application. Processes 300+ TPS for an accumulated total of well over 5 billion transactions since it went live in 2002. Utilizes the Linx Operations (see below) mainframe integration code and DB2. Uses hand-coded SAX technology for the core XML engine, as well as JAXB, security and encryption, multi-threaded coding, and scripting.

Deployed to the Fiserv intranet with WebSphere 5.1 on Red Hat Linux.

### **CheckFree BillPay Integration**

***Fiserv, 2004***

***Solo designer and coder***

Quickie servlet project to integrate the Fiserv SourceOne Internet Banking product to CheckFree's WebPay 3.2.3 product for paying bills online. Utilized JCA, JCE, Triple-DES encryption, VeriSign digital certificates, and SSL.

Deployed to the Fiserv intranet with WebSphere 4 on Solaris.

## **Linx Reports**

***Fiserv, 2003***

***Designer***

Quickie servlet project enables clients to build printed reports from their user data stored in the Linx Operations database. XML from LMS (see above) is converted into HTML or PDF format using XSLT and XSL/FO stylesheets. Uses XSLT and Apache FOP.

Deployed to the Fiserv intranet with WebSphere 4 on Solaris.

## **Linx Message Service SDK**

***Fiserv, 2002***

***Designer***

This software development kit consists of an API and Java implementation to help clients build applications that use LMS. Uses XML, JAXP, and SAX technologies.

Deployed as a jar file shipped to key clients.

## **Linx Operations**

***Fiserv, 1999 - 2001***

***Designer, coder, security architect***

This project built a browser-based interface to Fiserv core applications. My contributions included designing the overall security model, writing a Java Swing security administration tool, writing numerous tools and utilities.

Deployed in HP/Bluestone app servers on Solaris 2.7 with DB2 7. Delivered to client browsers as a Java applet. Swing utilities were deployed on client desktops as needed.

## **Corporate Business Model**

***RPS, 1998 - 1999***

***Solo designer and coder***

This was a suite of two-tier applications to perform business modeling functions. Responsible for three Java Swing applications and a database input tool. Direct JDBC to Oracle using JBuilder data access classes.

Deployed on client desktops.

## **Java Technologies Group**

***Intel Corporation, 1996 - 1998***

***Designer, coder, tester***

The Java Technologies Group was formed to first investigate, then optimize the Java platform on Intel processor-based PCs. My contributions included building a Java API to integrate with the Intel Common Data Security Architecture, optimizing a Java/C animation framework, prototyping applications for Intel's implementation of the Java Media Framework, coding tests of highly-optimized JVMs for the Intel platform.

Worked in Java, C, Applets, JNI, Java 2D, JCA, JCE, JMF

## **80960 Software Lab**

***Intel Corporation, 1990 - 1996***

***Designer, coder, tester***

This lab supported the i960 embedded microprocessor family with state-of-the-art compiler tools and technical support. I worked on debugger, assembler, and compiler technologies.

Worked in C and i960 assembler.



## Employment History

### **Artisan Solutions**

*Pittsburgh, PA*

*2014-present*

Owner, Principal Consultant

### **Summa Technologies**

*Pittsburgh, PA*

*2009 - 2013*

Senior Technical Consultant

### **Artisan Software Development**

*Pittsburgh, PA*

*2005 - 2009*

Owner, Principal Consultant

### **Fiserv SourceOne**

*Pittsburgh, PA*

*1999 - 2005*

Senior Software Engineer, Internet Network Architect

### **FedEx Ground**

*Pittsburgh, PA*

*1998 - 1999*

Senior Software Engineer

### **Intel Corporation**

*Portland, OR*

*1990 - 1998*

Software Engineer, Senior Software Engineer

## Education

### **Portland State University**

*Portland, OR*

*BS, 1990*

Major: Computer Science

Graduated: Bachelor of Science, Magna Cum Laude

### **Lane Community College**

*Eugene, OR*

*AS, 1986*

Major: Electronics Engineering Technician

Graduated: Associate of Science, Summa Cum Laude

### **Northwestern University**

*Evanston, IL*

*Attended 1974-1976*

Major: Radio, Television, and Film

## Technology Skills Overview

The following skills, tools, and platforms are those which I have used on professional projects. Not included are numerous others with which I have dabbled or used experimentally. Highlighted in red are those which I rate myself the highest.

**Languages:** Java 6+, C, JavaScript, HTML, CSS, SQL, XML, C# 4, Ruby 1.9, XSD, JSON, WSDL, BPEL, Unix/Linux scripts

**Enterprise Java Technologies:** Java EE 5+, Java Server Pages (JSP), Java ServerFaces (JSF) 1.2, Facelets, Struts 1 and 2, JNDI, JDBC, JMS, EJB, JAXB, JAXP, Servlets

**Enterprise Microsoft Technologies:** .NET Framework 4, ASP.NET MVC 3, BizTalk 2010, Entity Framework, LINQ, Castle Windsor 2.5

**Enterprise Middleware Technologies:** Tomcat 6+, IBM WebSphere Application Server 7 (WAS), IBM WebSphere Process Server 7 (WPS), IBM WebSphere Enterprise Service Bus 7 (WESB), IBM WebSphere MQ 7, BizTalk Server 2010

**Enterprise Frameworks and APIs:** Spring 3+, Spring MVC 3+, Hibernate 3+, Junit 4+, log4j, Spring Security 3+, Spring Integration 3+, Rails 3+, SAML 2, NHibernate, MyBatis, Entity Framework, NUnit, Quartz Job Scheduler, Apache POI, joda-time, Google Data APIs, log4net, OAUTH 2

**Databases:** Oracle 10+, SQL Server 2008, DB2, Sybase 15, PostgreSQL 9+

**User Interface Technologies:** jQuery 1.3+, Bootstrap, jQuery UI 1.8+, Slim, ICEfaces (AJAX), Java Swing

**Deployment Platforms:** Tomcat 6 and 7, Heroku 3+, IBM WebSphere Application Server 7+ (WAS), Oracle WebLogic Server 9+, , IBM WebSphere Process Server 6+, JBoss AS 6+, Microsoft Windows Server 2008

### Development Tools:

- For Java: Eclipse 3.5+, Oracle SQL Developer 3+, Maven, Ant, Ivy, Mockito, Liquibase, SOAP UI, IBM Integration Developer 6+ (WID), IBM Rational Application Developer (RAD) 6+, MyEclipse
- For Microsoft: Microsoft Visual Studio 2010, SQL Server Management Studio, SOAP UI
- For Ruby on Rails: RubyMine 4+, Rspec, Rake, RVM
- For Design: Balsamiq Mockups, Visio, IBM Rational Software Modeler
- Source Control: Git, Subversion, Tortoise SVN, Mercurial, Tortoise HG, Ankh Subversion
- Continuous Integration: Jenkins, Bamboo

**Project Management:** Rally, Trello, Pivotal Tracker, Jira, Fisheye/Crucible

**Performance Monitoring and Profiling Tools:** YourKit Java Profiler 11, IBM WebSphere Performance Monitoring Infrastructure (PMI), IBM Tivoli Performance Viewer (TPV)

**Development Methodologies:** Agile, Scrum, Kanban, Extreme, RUP

**Development Platforms :** Windows 7, Mac OS X, Red Hat Linux, Ubuntu Linux

**Deployment Platforms :** Linux all flavors, Windows Server 2008, AIX 5+

## Certifications

IBM Certified Solution Developer - WebSphere Integration Developer V6.1 (2009)

Sun Certified Java Programmer (2002)