

# WILLIAM PATTERSON

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## Senior iOS Developer, Java-Enterprise/Webapp Developer Agile Leadership Experience

- \* Versatile, creative software engineer offering 15+ years of experience in complex software development
- \* Expert iOS and web-application development
- \* Concentrations in object oriented design, database-driven applications and agile methods
- \* Excellent communicator and team facilitator, combining technical ability with social skills
- \* Deep experience in design patterns, OOP design/architecting, object-relational mapping

## TECHNICAL SKILLS

***Major Strengths. Technical:*** iOS/objective-C, Java (Java, servlets, JSP, JUnit/TestNG, etc), Java frameworks (Spring, Hibernate, Struts, iBatis, JSF, etc), REST and Soap Web Services; JavaScript, X/HTML, CSS, JSON, XML, AJAX; Apache, Tomcat, JBoss, Python, PHP/Zend-Framework. Maven, Ant, TeamCity.

***Major Strengths. General:*** OOP design principles and patterns, Agile development methods, object-relational mapping, relational database schema design and SQL, web services and SOA systems, web-application design, general UNIX/Linux use as dev environment and as sys-admin.

***Education:*** BS in Computer Science and Philosophy (*dual major*), Rensselaer Polytechnic Institute, Troy NY.  
***Past Certifications:*** Sun Certified Java Programmer, Oracle Administrator.

## PROFESSIONAL EXPERIENCE

### Principal, 7th Codex Software

5/2011 – Current

Contract and project-based software development for various clients, concentrating in iOS app development with additional projects in Java and Python. Created five apps under my own company, more than a dozen for clients, currently in App Store.

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- \* Author of nearly two dozen apps currently live in the App Store
- \* Built large, automated release/integration testing framework in python for corporate client that successfully identified more than a dozen undetected flaws in their production systems across releases.
- \* Other misc small projects for various clients, primarily in Java, PHP/MySQL and C++.

### Time Warner Cable, Advanced Tech Group West, Broomfield CO

Advanced Technology Group is responsible for all major software development for the company's cable plant infrastructure, video/telecom services and in-home set top boxes.

#### Developer / Scrum Master

10/2010 – 5/2011

Assumed primary responsibilities as scrum master for Prelude project: agile development team of 11 developers and testers. Time allocation is approximately 75% as scrum master, 25% continuing as developer.

- \* Turned deadline challenged team into on-schedule performers.
- \* Integrated conflicting client and server teams into single cohesive team.
- \* Transitioned to effective agile meetings and backlog usage.
- \* Trained product owner and other stakeholders on purpose and value of their roles.
- \* Led team's transition from Bugzilla to Jira for backlog and issue tracking.
- \* Coached other team members on agile transition and adapting standard agile practices to existing company culture.

### **Senior Software Engineer (TWC)**

**8/2007 – 5/2011**

Two major work areas (in addition to general server infrastructure work):

- \* “Conductor”: Large web application for TWC division administrators.  
*Technologies:* Java, JavaScript, HTML/CSS, Struts, JSP, Ajax/XHR, Spring, Dojo, GWT, web services, some JSF, Selenium, Ant, Red Hat, JBoss, IntelliJ/Netbeans/Eclipse.
- \* “Prelude”: Pilot project to move to server-based application model with thin clients. Real-time, high-volume and high-performance scalable server application with millions of set top boxes as display tier.  
*Technologies:* Java 6, Spring 3.0, TestNG, JMS, Solr/Lucene, CXF web services, Guava, JUnit, Maven.

Specifics:

- \* Researched, planned and began implementing transition to JSF.
- \* Re-architected major subsystem in MVC pattern as baseline example for new code development.
- \* Gradually assumed responsibility as dev lead for Conductor project.
- \* Developed API's to support third-party consumers of core Prelude project infrastructure.
- \* Built Chrome web extension for quick calls to internal web services.
- \* Built simulator tool for use in separating validation/testing of server components from client components (thereby resolving a major team friction/conflict point).
- \* Built field support tools (swing GUI) to ease adoption of software. Designed for easy transition to alternate GUI for probable move to national web-based tool in near future.
- \* Built internal systems for automated testing, functional isolation testing and web-based control of server software components.
- \* Created Soap and Rest web services and java clients.

### **Intrado Inc, Longmont CO**

**12/2006 – 7/2007**

Provider of 911 and e911 emergency services for national telecoms.

#### **Senior Software Engineer, Team Lead**

Developer and team lead on real-time high-performance logging/analysis subsystem for 911 emergency call systems software.

*Technologies:* Java, J2EE, spring, tomcat, several apache components, eclipse, hibernate.

- \* Took over as team lead for team of 5 developers (2 months into 6 month contract).
- \* Led packaging of work as component-API system for use by other process components.
- \* Implemented high-performance disk I/O buffering system and algorithms to manage data rate.
- \* Used agile processes to move team from consistently missing milestones to four straight months of hitting every milestone.

### **The Spitfire Group, Longmont CO**

**3/2006 – 12/2006**

Technology consulting firm specializing in business flow analysis and development of custom software.

Developers were direct customer facing with minimum 10+ years consulting experience.

#### **Senior Technical Specialist**

Technology consultant and Java architect/developer on multiple applications.

*Technologies:* J2EE, OC4J/Oracle, Struts, Javascript/DOM, Spring, Hibernate, DisplayTag, SiteMesh, JSP, XDoclet, Ant. Full agile-process shop (using VersionOne tools).

- \* Built reporting system using databases and third party reporting tools for geo-location tracking company, based on web architecture and oracle database.
- \* Initial architecture consulting and follow-on SOA implementation of data-driven real estate listings. Completed early and with extra features.
- \* General software and business-workflow consulting.

### **Lockheed Martin (via CSC contract), Denver CO**

**2005 – 3/2006**

The space systems launch division designs and builds satellite launch systems (orbital launchers).

#### **Software Developer**

*Technologies:* Java/J2EE, C/C++, Apache, Tomcat, VB, MySql.

- \* Built applications to support translation/migration of internal data between various CAD & database systems.
- \* Built java/swing tools for engineering staff to control and coordinate use of existing data processing tools.
- \* Designed and built web services architecture to make pc-based applications available to java/unix web application. Built releasable API's to support this effort.
- \* Introduced professional design / development practices (revision control, central documentation trees, spiral development, small-scale scrum, etc).

### **W. E. Dailey Inc., Bennington VT**

**2003 – 2004**

Regional company supplying ready-mix and prefabricated concrete products to construction industry.

#### **Software Developer/Consultant**

*Technologies:* Java, JavaScript, DOM-manipulation, HTML, J2EE, SQL Server.

- \* Developed export/import system for data transfer and integration in corporate data systems (RDMS/SQL).
- \* Developed advanced custom reports for various company divisions. Delivered DBMS/software user training.
- \* Developed custom extensions to corporate data systems to overcome pre-packaged system limitations.
- \* Wrote web-based documentation and reference materials for corporate data.

### **LogicSpark Inc., Bennington Vermont**

**1999 – 2003**

Startup focusing on software-as-a-service applications. Using a common core for database storage and web presentation of lists and records, built several niche-market custom applications.

#### **Lead Developer/Architect**

*Technologies:* Java, JavaScript, DOM-manipulation, HTML, J2EE, SQL Server, CSS.

- \* Led team of programmers (3-4) producing several large, complex web-based database-driven applications.
- \* Oversaw design, implementation and documentation of custom core APIs in java (700+ classes) and JavaScript (6500+ lines of code), as well as the applications built using those libraries.
- \* Designed/implemented/administrated complex SQL Server databases.
- \* Installed and managed company web/database/applications servers.
- \* Prepared written proposals, specifications and documentation for software, in addition to implementation and design documents. Consulted and coordinated with customers/users.

### **Corporate Software Development Trainer, New York**

**1993 – 2004**

*Part-time / Occasional*

Corporate trainer teaching multi-day and multi-week classes for corporate clients, generally working as a subcontractor for training providers. *Formerly Microsoft Certified Trainer (MCT).*

- \* Employed by Fortune 500 companies including: Merrill Lynch, Lehman Brothers, Federal Reserve Bank, etc., and have delivered 200+ days of training.

- \* Class topics included: Java, C/C++, Microsoft Access programming, Java Script, HTML, Active Server Pages, Visual Basic, Crystal Reports, etc.
- \* Developed two custom 3-day “Masters” level programming courses, including 40+ page manuals, example programs, in-class programming activities.

## **Free-Lance Software and Web Developer, New York**

**1992 – 1999**

*Representative projects for various clients included:*

- \* Data processing automation system for a county government agency (Access, VB).
- \* Web site development (HTML, DHTML, VB/Java Script, CGI, Front-Page, Cold Fusion, other web dev tools).
- \* Development of web-based NT user administration system (via Active Server Pages).
- \* Development of industrial record keeping and reporting system for reporting activity to EPA (C++, VB).
- \* Cross-platform GUI development.
- \* Communications protocol development and implementation for real-time control system interface.
- \* UNIX system/network configuration and administration.