**WILLIAM PATTERSON**

Boulder CO

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[**www.7thcodex.com**](http://www.7thcodex.com)

**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.

See: [www.7thcodex.com](http://www.7thcodex.com)

\* 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.