

John N. Armstrong

3505 Terry Drive
Plano, TX 75023
john@objectivelogic.com
Office: 972-529-0195

Drawing on a broad and deep background of experience in business software and vendor product development, Mr. Armstrong specializes in the architecture, design, development, and implementation of advanced applications and systems software solutions, delivered on time and on budget. He brings a well-rounded and seasoned approach to the application of proven information technology in today's challenging and highly competitive e-business environment.

Highlights

Summary

- Architecture, design, and implementation of Java-centric systems (9 years of Java experience, including JEE)
- Leadership for development teams
- Complete software lifecycle experience, including analysis, requirements, architecture, design, implementation, testing, production, maintenance and enhancement
- Rapid assimilation of new technologies
- Strong advocacy of Open Source Software (OSS)
- Excellent problem solving skills
- Strong commitment to exceptional documentation and technology transfer
- Proven ability to work independently and in a team setting
- Experienced mentor, teacher, and instructor

Key Skills

Java-centric architectures including **JEE**, **High-performance, high-availability, highly-scalable** systems, **Service-Oriented Architectures**, Relational **database**, **Multi-platform** integration, **Rule-based systems**, Strong **open source software** advocacy, Rapid assimilation of **new technologies**, **Multi-threaded** processing, Multiple **communications protocols**, **Transaction** processing, **Real-time** systems, **Mentoring**, Excellent oral and written **communication skills**, Experienced classroom **instructor**, Excellent inter-personal skills

Operating System Platforms

Linux, Unix, Windows, OS X

Enterprise Platforms

Java Enterprise Edition (JEE), BEA Weblogic, GigaSpaces, ILOG JRules

Database

Oracle, DB2, HSQLDB, Derby, MySQL, SQL, Stored Procedures

Frameworks, Technologies

JEE, JSP, Servlets, EJB, JMS, JDBC, JPA, Spring, Wicket, Ajax, Hibernate, Swing, HTTP/S, Web Services, SOAP, TCP/IP, SSL, JNI, Google Web Toolkit (GWT), .NET

Languages

Java 6, Java 5, Groovy, C#, C++, C, XML, XSD, HTML, SQL, Jython

Tools

Maven 2, Ant, Subversion, CVS, CruiseControl, XMLBeans, Castor, Jetty, JUnit, Log4J, IntelliJ IDEA, Eclipse, NetBeans, Axis, Axis2, Bugzilla, JIRA, Confluence Wiki, Borland StarTeam, SquirrelL, Toad, Dreamweaver, Grinder, JMeter

Academic Accomplishments

- **M.S.C.S.** **Masters, Computer Science**
 Southern Methodist University
- **B.S.E.E.** **Bachelors, Electrical Engineering**
 University of Cincinnati

Professional Experience

Objective Logic, L.L.P.
Plano, TX
Senior Partner
1999 - present

Objective Logic, L.L.P provides consulting services to clients whose companies and products are well known in their respective industries, specializing in the architecture, design, development, and implementation of Java-centric enterprise system integration solutions and vendor products. Mr. Armstrong is Objective Logic's owner and principal consultant.

(American Electric Power, Inc.) – Lead Developer of a team providing the architecture, design and implementation of a web-based multi-user system that facilitated the trading of EPA Emission Allowances on the open market.

- Participated in and contributed to all phases of development, including project schedule, requirements gathering, definition and review of requirements, architecture, design, implementation, system and user acceptance testing, and production startup.
- Designed and implemented the system's major components, including business logic, web services, persistence, and security.
- Provided leadership and mentoring for the team's developers including Java 6, JPA, Axis2, NetBeans, Eclipse, WebLogic
- Work was done independently and remotely as a member of a virtual team, with onsite visits with the client as necessary.
- Technologies and tools included Java 6, Java 5, .NET, JPA, Axis2, NetBeans, Eclipse, WebLogic, Tomcat, Oracle, Oracle SQL Developer, PL/SQL Developer, SquirrelL, RSA/ClearTrust, CVS, Bugzilla, Windows XP, Ubuntu, and Sun VirtualBox

(Financial Services – Revolution Money, Inc.) – A highly-scalable, high-volume credit card transaction processing system built on the [GigaSpaces](#) platform (2008)

- Designed and implemented the system's Authentication component responsible for validating the identity and the credentials of users.
- Defined project structure, development environment, and processes based on Subversion, Maven 2, and IntelliJ.
- Provided leadership and mentoring for a team of developers including Java 5, Maven 2, Subversion, IntelliJ, and GigaSpaces.

- Work was done independently and remotely as a member of a virtual team, with onsite visits with the client as necessary.
- Technologies and tools included GigaSpaces, Java 5, Spring, JPA, XML, XSD, Oracle, XQuery for Java, Java Security, Digital Signature, Subversion, Maven 2, Ant, XMLBeans, Castor, Log4J, JUnit, IntelliJ IDEA, Confluence Wiki, Eclipse, JIRA, CruiseControl, Linux, Windows, OS X, Drools

Conversion Technology Corporation – A Web-based User Interface for a Mainframe-hosted Vendor Software Product (2007)

- Responsible for architecture, design, and implementation of an innovative, browser-based, distributed user interface for a mainframe-hosted application for a major systems software vendor.
- Performed analysis of the problem domain, formulated requirements, developed the project plan, selected appropriate technologies, and implemented, tested, and delivered the finished system to the client.
- The project required a fresh and objective approach to the selection of an architecture, choice of technologies, and the implementation.
- Employed a continuous iterative development model that delivered incremental functionality in approximately 4-week cycles over the duration of the project.
- All work was done independently as part of a virtual team, with onsite visits with the client as necessary.
- Technologies and tools included Java 5, Jetty, Spring, Wicket, AJAX, TCP/IP, OS X, HTTP, XML, XSD, Subversion, Maven 2, Ant, Log4J, JUnit, IntelliJ IDEA, Eclipse, Bugzilla, IBM z/OS

Aurora Loan Services (Lehman Bros) – Mortgage Underwriting System (2004 – 2007)

- Provided platform architecture and infrastructure for a 24x7, web-hosted, rules-based complete Mortgage Underwriting system for a financial services institution. The system provides mortgage product eligibility determination, loan pricing, underwriting decisioning, and consumer credit retrieval and analysis implemented as SOA services, on a JEE WebLogic and Linux platform.
- Successfully delivered two major systems (Eligibility determination and Full Evaluation) into 24x7 production.
- Employed a continuous iterative development model that delivered incremental functionality in approximately 4-week cycles over the duration of the project.
- Responsible for architecture, design, and implementation of
 - A sophisticated Hibernate-based data caching mechanism to support high-performance access to critical business data hosted in a DB2 database with real-time updates. Also supported automated retrieval of *versioned* data (including business rules) that facilitated processing of a transaction on an arbitrary prior or future date in time.
 - A state-of-the-art Credit Analysis Engine that performed in-depth analysis of XML consumer credit reports obtained from the national credit repositories, producing detailed XML credit summaries in support of business policy.
 - A Money class library that provided the fundamental architectural framework for dealing with extensive monetary data and computations in a straightforward, consistent, and reliable manner.
 - A Performance Profiling tool that facilitated the acquisition of ad hoc internal performance characteristics for arbitrary code paths, supporting the identification and resolution of potential performance bottlenecks.

- A Swing-based tool used to monitor the progress of very long-running regression tests (consisting of 10's of thousands of tests), reporting statistics such as the total number of tests, tests run, tests passed, tests failed, estimated time-to-complete, etc.
- Designed and conducted performance testing of the entire system to prove that design goals were met with respect to capacity, scalability, thread safety, and reliable management of system resources.
- Designed and implemented in-depth, extensive regression testing of key system components to ensure code quality and functional integrity of deliverables.
- Mentored other team members and brought new members of the team quickly up to speed on the system architecture, business domain, etc.
- All work was done independently and remotely as part of a virtual team with members located throughout the United States, with on-site client visits as necessary.
- Technologies and tools included Java, JEE, BEA WebLogic, Web Services, SOA, Linux, Windows, DB2, Hibernate, JDBC, SQL, Stored Procedures, Swing, HTTP, XML, XSD, JMS, Ant, Maven 2, JIRA, Borland StarTeam, Log4J, JUnit, ILOG JRules, Jython, IntelliJ IDEA, Grinder

Avatier Corporation – Employee Self-Managed Account Provisioning (2004)

- Responsible for architecture, design, and implementation of a Java-based, remote system administration facility for IBM's mainframe Resource Access Control Facility (RACF). The system allowed both end users and administrators to perform 24x7 remote administration of user accounts, including creation of accounts for new users, changing and resetting user passwords, suspending and re-activating user accounts, etc.
- Objective Logic was retained by the client on the basis of our unique experience with both Java and the IBM mainframe, and a proven ability to integrate disparate systems and technologies.
- Special challenges included implementation in Java on the mainframe and developing an interface from Java to RACF.
- All work was done independently and remotely as part of a virtual team.
- Technologies and tools included Java, C, JNI, HTTP/S, TCP/IP, CVS, Ant, make, IntelliJ IDEA, IBM RACF, Unix System Services (USS), z/OS, OS/390, z/OS Assembler

Washington Mutual – Mortgage Credit Scorecard (2003)

- Provided platform architecture and infrastructure for a rules-based custom Mortgage Scorecard application implemented as a secure web service that analyzed consumer credit information and other data to assess credit worthiness and risk.
- Provided secure, encrypted HTTP/S communications between the client desktop and the system, along with data compression in both directions to optimize utilization of available network bandwidth.
- Supervised vendor competition and made recommendations to the client on the choice of a business rules management system.
- All work was done independently and remotely as part of a virtual team with onsite client visits as necessary.
- Technologies and tools included Solaris, Windows, Java, JEE, BEA WebLogic, Web Services, Apache, SOAP, HTTP/S, SSL, data compression, XML, XSD, JMS, Ant, Borland StarTeam, JUnit, ILOG JRules, Blaze Advisor, IntelliJ IDEA

ILOG, Inc. – JRules Customer Consulting and Training (2002 – 2004)

- ILOG JRules is the industry-leading Business Rule Management System (BRMS) for Java business applications used by Fortune 100 companies as the foundation of their business policy automation.
- Partnered with ILOG to provide consulting services to ILOG's customers as well as in-depth classroom-based training for ILOG's customers and employees.
- Traveled to customer and company sites, presenting week-long, in-depth classroom training.
- Technologies and tools included ILOG JRules, IBM WebSphere, Versata, JBuilder, Eclipse

BEA Systems, Inc. – WebLogic Server (2001 – 2002)

- Provided technical expertise that allowed BEA to integrate their industry-leading WebLogic Server product with the mainframe, facilitating the fully transactional interoperability of business logic hosted on a JEE platform (as EJB's) with business logic hosted on the mainframe (for example, CICS and IMS transactions).
- Technologies and tools included BEA WebLogic, Java, JEE, C++, CVS, Unix, Windows NT, IBM APPC, CPIC, OS/390, Unix System Services (USS), CICS, IMS, OTMA

WebLink Wireless, Inc. – Application Deployment Framework (1999 – 2001)

- Created a custom JEE platform architecture to support the development of new web-based front-end provisioning and customer services and their integration with the company's existing key back-end business systems. In addition, a new application was developed on this platform that allowed customers to activate their paging devices online.
- Technologies and tools included Solaris, BEA WebLogic, Java, JEE, EJB, JSP, Servlets, JDBC, Oracle, Vitria BusinessWare

Articles and Publications

- *Java and Monetary Data*, published in the May, 2004 issue of Dr. Dobb's Magazine.