

Conrad Gustafson

Software Architect

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Profile

Conrad Gustafson is a confident software architect, team lead and senior programmer with strong technical skills, a keen business sense and expert-level communications abilities.

His expertise lies in analyzing complex business problems from a technical perspective, providing robust and appropriate architectural and design solutions, and leading team members in construction activities. He is well-versed and experienced in agile methodologies and techniques.

Conrad has experience in all levels of the software development life cycle. He has extensive experience with Java, Microsoft and Oracle environments and is a Sun Certified Enterprise Architect for the Java Platform, Enterprise Edition (JEE).

Employment History

Company	Location	Position	Years
Standing Wave Software Inc.	Victoria, BC	Software Architect, Senior Programmer	2007 - present
CGI Management and IT Consultants	Calgary, AB & Victoria, BC	Senior Systems Analyst	2005 - 2007
OA Solutions	Victoria, BC	Senior Systems Consultant	2004 - 2005
Fujitsu Consulting	Victoria, BC	Systems Delivery Consultant	2002 - 2004
Standing Wave Software Inc.	Victoria, BC	Senior Programmer, Software Architect	2002
eXI Solutions	Victoria, BC	Systems Analyst	2001 - 2002
Stormworks Inc.	Calgary, AB	Programmer / Analyst	2000 - 2001
Datap Systems Inc.	Calgary, AB	Programmer / Analyst	1999 - 2000

Project Experience

Standing Wave Software Inc.

Passenger Manifest – BC Ferries Corporation

- Architecture and design for complex distributed, multi-client system
- Web services implementation architecture
- Senior Java JEE development
- Object-relational mapping using Java Persistence Architecture (JPA)
- Test-driven development with JUnit
- GUI implementation using Vaadin web application framework

Operations & Security Centre (OSC) – BC Ferries Corporation

- Team leadership
- Architecture and design for complex distributed, multi-client system
- Web services implementation architecture
- Senior Java JEE development
- GUI implementation and object-relational mapping using Oracle ADF

Online Application Transaction System (OATS) – BC Agricultural Land Commission

- Team leadership
- Web services implementation architecture
- Senior JEE coding
- Model-Driven Architecture (MDA) research and development using AndroMDA
- Object-relational mapping using Hibernate

Scale Administration and Control System (SCS) -- BC Ministry of Forests and Range

- Designing, developing and testing JEE and Oracle system components
- Object-oriented design
- Mentoring team members in object-oriented and JEE techniques
- Performing technical code reviews
- Initiating and leading design discussions with client business personnel
- Documenting detailed technical requirements

Corporate Online Registration System (COLIN) -- BC Ministry of Finance

- Writing detailed design documents for system enhancements
- Refining and documenting business requirements
- Coding and testing complex JEE components

OneStop Business Registration System -- BC Ministry of Finance

- Documentation review
- Architectural overview
- Technical overview
- Interviewing key business and technical team members
- UML diagramming
- Reporting findings and recommendations

Corporate Online Registration System -- BC Ministry of Finance

- Documentation review
- Architectural overview
- Technical overview
- Interviewing key business and technical team members
- UML diagramming
- Detailed design for migration to service-oriented architecture

CGI Management and IT Consultants

Gaming BC (GBC) – Ministry of Public Safety & Solicitor General

- Team leadership
- Web services implementation architecture
- Agile methodology mentorship
- Object-oriented design
- Senior Java JEE development
- Automated test writing using JUnit

Production Accounting System (PAS) – CGI Calgary in partnership with Oil & Gas Consortium

- Team leadership
- Agile methodology mentorship
- Object-oriented design

- Java JEE development
- Oracle schema design
- Object-relational mapping using Toplink
- Automated test writing using JUnit

Standing Wave Software Inc.

Sector Business School

- Stakeholder needs analysis for online course registration system
- System architecture preliminary consultation
- Leading JAD sessions
- High-level requirements document

OA Solutions

Continuous Monitoring System (CMS) – Ministry of Sustainable Resource Management

- Supervising architectural decisions during detailed design and construction
- Leading a technical team in detailed design, construction and testing of a medium-sized system
- Leading requirements and design sessions with clients
- Troubleshooting technical issues
- Planning a development environment
- Choosing and communicating development standards
- Detailed design, construction and testing of specific modules
- Implementing a JMX-based dynamic monitoring system
- Overseeing database design and asynchronous messaging implementation using Oracle Advanced Queueing

Water Inventory Data Management System (WIDM) - Ministry of Sustainable Resource Management

- Overseeing architectural issues and principles
- Creating work plans
- Mentoring team members
- Architecting and designing a Java Web Start application for field measurement collection

Development Approvals Business/Systems Assessment (DAS) - Ministry of Transportation, Highway Planning Branch

- Modelling and assessing current business processes
- Gathering and documenting current business requirements
- Identifying opportunities for business process improvements
- Analyzing off-the-shelf system solutions
- Presenting findings to Ministry Information Standards Branch committee

Fujitsu Consulting

Contract Allocation and Renewal System (CARS) – BC Government Common IT Services (CITS)

- Engaging in requirements-gathering sessions with client representatives
- Designing complex financial reporting and processing algorithms
- Reverse-engineering complicated functionality of a legacy system
- Coding and testing financial processing modules in Access XP

School District Contact List (SDCL) - Ministry of Advanced Education

- Leading a small team of JEE developers
- Conducting code reviews and mentoring junior developers
- Refining and documenting a software architecture
- Communicating with Ministry architects and DBAs
- Designing software patterns and frameworks
- Implementing and automating a deployment strategy

BC Reusable Internet e-Service Framework (BRIEF)

- Creating a library of JEE software components to facilitate development of Internet applications to BC Government standards
- Refactoring a very large code base (OneStop) into reusable components
- Enhancing large sections of Java code to meet future business needs
- Programming and testing a reference architecture
- Extensively documenting using UML

OneStop Business Registration System - Ministry of Finance

- Conducting code reviews to ensure adherence to Architectural principles
- Participating in functional design process
- Attending JAD sessions with client representatives from multiple Ministries
- Prototyping and designing software architecture using JEE
- Developing OneStop Business Registration Internet application, one of the most prominent and award-winning Government e-service initiatives in BC
- Developing OneStop administration Internet application using Oracle BC4J, JAAS, and JNDI.
- Prototyping an abstract development framework using Jakarta Struts 1.1 and Oracle Toplink
- Implementing latest BC Government portal standards
- Mentoring team members on Struts, Java, and supporting technologies
- Prototyping and developing an Internet application persistence layer using Oracle Toplink
- Generating and customizing BC4J classes and custom JSP tags

C.E.I.S Online Court Information System – Ministry of the Attorney General

- Designing and documenting a JEE architectural environment
- Estimating and tracking project tasks
- Estimating and documenting change control requests
- Producing comprehensive test plans
- Designing and developing an online court information system using JEE, Jakarta Struts 1.0 and Oracle stored procedures.
- Designing Oracle PL/SQL packages and stored procedures

eXI Solutions

General Operations

- Leading and participating in the development of responses to Government requests for proposals (RFPs).
- Attending Government RFP bidder's meetings
- Acting as assistant technical architect for major proposal development

BC College of Physicians & Surgeons

- Converting a suite of MS Access 97 applications with local file storage to ODBC-connected SQL Server 7.0 storage and Access 2000 forms

OneStop Business Registration System – Ministry of Competition, Science and Enterprise

- Participating in requirements gathering and architecture and design sessions
- Analyzing and reporting on disabled access compliance and strategies
- Leading the development of test planning
- Acting as customer point of contact for warranty and maintenance issues
- Managing releases including configuration management using CVS
- Analyzing, designing and implementing changes necessary to convert an Oracle8i MOWI PL/SQL intranet system to run on the Internet
- Creating, enhancing and troubleshooting components of a JEE application including Servlets, JSP pages, and PL/SQL procedures
- Debugging and enhancing Oracle PL/SQL procedures
- Maintaining Oracle8i databases

Cromedica Global Inc. (now PRA International)

- Analyzing company workflow and data transfer using UML
- Collecting and describing requirements for an intranet portal
- Training staff in Crystal Reports and Crystal Enterprise development
- Designing a database to convert an existing Lotus Notes database into Oracle
- Using Lotus Enterprise Integrator (LEI) to populate an Oracle data warehouse
- Creating a Visual Basic tool to add spreadsheet data to a data warehouse
- Creating and updating a suite of Crystal Reports for a Lotus Notes database
- Installing, configuring and implementing a Crystal Enterprise server

eXI Bluetooth Area Network (BAN)

- Bluetooth protocol research, analysis, testing, and programming
- Troubleshooting PPP connections over Bluetooth for various devices

Wireless Research and Development

- Creating a game prototype for hand held devices using the Java KVM
- Researching and prototyping WAP applications

Juricert Services Inc.

- Analyzing business reporting needs
- Coding and testing Java Servlets
- Programming ASP pages using the Crystal Reports Report Designer Component for maximum report security
- Creating SQL Server 7.0 views and stored procedures
- Writing Seagate Crystal Reports with dynamic query parameters

Stormworks Inc.

- Identifying and documenting use cases and scenarios using UML
- Distilling general business processes into explicit requirements and objects
- Implementing n-tier, transaction-based Microsoft COM+ architecture
- Designing and building robust COM+ components in Visual Basic 6.0
- Using ASP, HTML, XML and client-side JavaScript to present business logic
- Designing and implementing automated systems to load historical data

- Installing, customizing, integrating and maintaining Pivotal eRelationship web-based CRM software, becoming main company contact for Pivotal knowledge
- Designing and maintaining a SQL Server 7.0 database

Datap Systems

TeMIP Web Application Server

- Successfully implementing a CORBA web application server architecture
- Independently integrating an existing C++ library with a new application server
- Working with Java, C++ and C programming languages, successfully integrating existing C++ classes and C routines with new Java applets in a distributed, nearly real-time environment using CORBA

Certification

2004 Sun Certified Enterprise Architect for Java Platform Enterprise Edition Technology

2004 Microsoft Certified Programmer (Developing Windows Applications using Microsoft .NET)

2001 Sun Certified Programmer for the Java 2 Platform

Education

2010 Oracle ADF 11g Application Development

2005 Testing for Developers With JUnit (2 day intensive course with ClearStream Consulting)

2004 Mastering Rational ClearCase UCM

2003 Microsoft C# .Net Developer Training

2001 Sun Technologies Course SL-275: Java Programming Language

2000 Attended Microsoft Dev Days Conference: Introducing .NET

1999 University of Calgary: Object Oriented Software Technology Diploma

Java, Networking, Object Oriented Analysis and Design, Visual C++, Visual Basic, Effective Coding and Testing, Project Management, Oracle RDBMS

1996 University of Calgary: B.A. in Philosophy with Distinction

- Areas of Concentration: Analysis, Formal Logic, and Philosophy of Mind
- Awards: Dean's Medallion award for highest graduating GPA in the Department of Philosophy

Interests

Parenting: Proud and devoted father of two

Aikido: Second-degree black belt, founder and chief instructor Victoria Family Aikido

Music: Grade 6 Royal Conservatory Classical Guitar