

Lance E. Belisle

SENIOR SOFTWARE ENGINEER

User Controls ■ Network ■ Infrastructure ■ Design

■ Profile

Self-motivated professional with 20+ years experience in providing successful, cost-effective software solutions. Diverse experience derived from rapid learning and effective application of leading-edge tools. A creative problem-solver able to solve complex technical problems, recognized for exceptional work while achieving time-critical deadlines. Solid team player demonstrating diligence, superior work ethic, strong communications skills, and a positive attitude.



- Object Oriented Development
- Distributed/Client Server Systems
- Custom User Controls
- Multi-Threaded Programming
- Platform/Network Development
- Assessment & Application of new tools

■ Technical Skills

Languages: C#, Java SE, Visual Studio C++, gcc, C++ CLI, bash, awk

Methodologies: OO, UML, Design Patterns, Generic Programming

Databases: Oracle PL/SQL, MS SQL

Networking: TCP/IP, UDP, ASN.1, Java RMI, MS Message Queues, Data Distributed Services, DIS, SNMP

Tools: Visual Studio, Netbeans IDE, Eclipse, Clearcase, Microsoft Office, MKS, Subversion, VMWare

APIs: JSE(NIO, Swing, Concurrency, RMI, JDBC) .Net (Windows Forms, ADO.NET), C++ (MFC, STL, C++ TR1, The ADAPTIVE Communication Environment) C (BSD Sockets, Posix 1.x, Win32)

OS: Windows, Linux, Unix

Fields: Military/Aerospace, Public Safety, High Availability, Gas & Oil, Simulators

■ Professional History

- **CRITICAL CONTROL, Calgary, AB** Feb 2011 – Oct 2011
Oil and Gas Section Production Data Management, Gas Chart Integration
- **CAE PS/Xwave/Prior, Kanata, ON** Mar 1994 – Jan 2011
Aerospace

■ Education

- *B. Engineering (Mechanical)*, University of Saskatchewan, Canada (1983)
- *4th year Electrical Engineer, Technical University of Nova Scotia (5 year program) as part of Navy training(1986)*
- *Combat Systems Engineer, Canadian Naval Office, October 1983 to November 1987*

■ Additional Information

References available upon request

Detailed chronological resume available upon request or visit <http://www.preo.ca/SoftwareDevelopment.aspx>

■ Notable Projects and Achievements/Experience Highlights

CAE/PS - Jan'10 - Aug'10 (Senior Software Developer - sole developer/designer)

Project Title: Xwave Tactical Mission Training (TMT) - Boeing Multi-Mode Radar Simulator (MMRS)

Challenge: To modify the existing TMT simulator to use the MMRS. This was a technology demonstration of system integration capabilities between CAE and Boeing for a proposal.

Action: Integrate the MMRS into our TMT product.

Technical Environment: The TMT student console was implemented using C++/MFC on Windows. The MMRS was run on a separate computer (Windows based) and connected via a DVI output to a capture card. The MMRS library supported remote communications via BSD Sockets (TCP/IP).

Skills Used: Visual Studio 2005/2008 C++/C++ CLI/.Net

Result: The MMRS was successfully integrated into the TMT. A tester was developed for the TMT - MMRS integration which allowed Boeing to test the MMRS as used by the TMT.

CAE/PS - Jan '08 - June '08 (Team Lead)

Project Title: Prototyping the interoperability of subsystems for the Halifax Class Modernization

Challenge: To demonstrate Xwave's ability to integrate Elisra's ESM, and Saab's CCS.

Action: Worked closely as a designer and developer with three different organizations to rapidly integrate their software systems. Lead the team of two to implement the subsystem and integrate it on-site. Elisra's ESM was made to interoperate with Saab's and CCS. Prepare the project development environment for the next phase when the team size will increase from two to ten.

Technical Environment: The software is being developed in Java 1.6. The UI development was in Swing. RTI Data Distribution Service for Real-Time Systems is used extensively. The target platform is R.H.E. 5.1 Linux. Elisra's ESM used a simple message based proprietary RPC based on BSD Sockets. Saab's CCS used RTI DDS. The developed software (adaptor pattern) would connect to both systems and convert the data structures to/from DDS to Elisra's protocol.

Skills Used: Java 1.6 SE, RTI DDS, MKS, Netbeans, JUnit, Red Hat Linux, BSD Sockets

Result: Introducing Java into the Command Control System of the Canadian Patrol Frigate Class. Lockheed Martin (the prime constrator) was sufficiently impressed incorporate Java into their development. This technology demonstration was an important part of Xwave's successful bid to demonstrate to the Canadian Navy the ability to integrate existing systems.

CAE/PS - Sept '05 - Dec '07 (Software Developer & Onsite Software Lead during acceptance)

Project Title: XwaveCAD Enhancements for FREMS

Challenge: Enhanced the Xwave's Computer Aided Dispatch System to include ambulance

Action: Improved productivity through the introduction of C# and managed C++. Enhanced the application to use (1) color highlighted entry errors on (similar to JSF) MFC, (2) incorporated US standards and weights entry/display into a previously Metric system, (3) enhanced the architect to support multi-role fire/police/EMS. A key to implementing these features within schedule was designing drop in replacement controls that would fit within the existing design.

Technical Environment: The workstation/client application is written in Visual C++ 2005/MFC and incorporates an embedded Web browser/JSF. The server components are written in C, Pro-C, PL/SQL (Oracle 10g). The newer server components are written in C++ CLI (.Net 2/ ODB.Net) with the supporting UI written in C#.

Skills Used: Oracle 10g, C++ CLI .Net 2, Visual Studio 2005/C++, Clearcase

Result: The enhanced Xwave Cad was delivered to FREMS and will be deployed nationally across Canada as an upgrade to existing deployed systems.