

Java Expert

Specialties

Java (J2EE & J2SE), GWT, Tomcat, Jetty, JBoss, EJB, Servlet, JSP, Taglibs, JavaBeans, JDBC, DBCP, SQL, Oracle, MySQL, Sybase, PostgreSQL, SquirrelL, SQLDeveloper, JMS, ActiveMQ, IBM MQ Series, XML, XSD, XSLT, XPath, SOAP, WSDL, Axis2, XFire, JAXB, JAXWS, SOA, OSGi (Knopflerfish, Equinox, Felix), Mina, TCP/IP, SMPP, HTTP, HTTPS, SSL, HTML, CSS, Javascript, JMeter, BeanShell, JProfiler, JProbe, Heap Dumps, JMap, JHat, HeapAnalyzer, VisualVM, JConsole, Wireshark (Ethereal), tcpdump, Eclipse, Ant, Maven2, Archiva, VNC, Autosys, Subversion, CVS, Perforce, PVCS, Unix, AIX, GNU/Linux, Debian, Ubuntu, Red Hat, Cygwin.

Spoken and written languages: **French, English**

Work Experience

September 2009 – January 2010

OpCode Solutions Inc.
(My Company / My Project)

Java Expert

- Architecture and development of interactive multiplayer gaming and chat platform Good Camel Games. Good Camel Games is in its infancy and is being developed: <http://games.goodcamel.com/>
- Architecture, Development and optimization of an extremely lightweight Pub/Sub engine able to support several thousands of Topics, Publishers and Subscribers while requiring very little system resources. This Pub/Sub engine is at the core of Good Camel Games and allows the exchange of information needed for the chat and interactive games.
- Using Google Web Toolkit (GWT) client side, which helps develop a Java client compiled in JavaScript and facilitates the support of all major browsers: IE, Firefox, Chrome, Safari, etc..
- Integration with Facebook allowing users to invite their friends to play. The platform can also be accessed as a Facebook application: http://apps.facebook.com/good_camel_games/
- The platform is designed to simplify the addition of new multiplayer games. The goal is to reduce the development time of a new interactive game to a single day. The last 6 games (Do You Know Your ...) have been developed in only 5 days (5 days for all 6 games).

Technologies: **Java 6, GWT, Gwt-Voices, Facebook-Java-API, Tomcat (J2EE, Servlet, JSP), SQL, MySQL, JDBC, DBCP, XML, Debian GNU/Linux, Wireshark, VisualVM, Jconsole, Ant, Eclipse, Subversion, SquirrelL, Cygwin.**

August 2008 - October 2009

Gemalto Inc.

Consultant Java

- Participation in the Java back-end development of MSN Mobile and Mobile Banking applications.
- Applications must support 500 000 simultaneous users and several hundreds of queries per second.
- Gave several architecture and design advice.
- Optimization of the performance, scalability and memory consumption of the applications.
- Investigation and resolution of stability bugs (issues that cannot be seen in QA): concurrent issues, deadlocks, memory leaks, etc..
- Development and maintenance of the simulator and other tools used for performance and load testing.
- Tuning the configuration of various components: connection pools, thread pools, size of FIFO queues, timeouts, etc..
- Characterization of hardware requirements for various load levels.
- Participation in knowledge transfer in Singapore for MSN Mobile.

Technologies: **Java, OSGi (knopflerfish, equinox, Felix), Jetty/Tomcat (J2EE, Servlet, JSP), XML, XSLT, XPath, SOAP, XFire, Mina, SMPP, Oracle, MySQL, JDBC, Hibernate, DBCP, JFreeChart, GNU/Linux, JProfiler, Heap Dumps (JMap, JHat), Wireshark, Ethereal, tcpdump, JConsole, JMeter, BeanShell, Maven2, Archiva, Ant, Eclipse, Subversion, SquirrelL, SQLDeveloper, VNC.**

March 2006 – July 2008

Tecsys Inc.

Solutions Architect / Java Developer

- Participation in the architecture and development of custom application enhancements.
- Participation in the design and implementation of the Java framework of the application.
- Responsible for the stability and performance of the application.
- Internal support to other teams.
- Investigation and resolution of complex problems (in prod at customer site) that were not always caused by our application (3rd level support).
- Implementation of JAX-WS for Web Services Architecture (SOA).
- Implementation of Apache DBCP for architecture offering greater sharing and more flexible management of DB connections.
- Architecture and development of the FTP data transfer feature for an automated interaction with legacy systems.
- Investigated (and fixed) memory leaks using Heap Dumps (HeapAnalyser, JMap, jhat).
- Architecture and development of a memory manager to detect and mitigate the problems of memory over-use in real time.
- Investigation and resolution of performance problems with a Java profiler (JProfiler).
- Development of a load testing tool to simulate several concurrent users.
- Characterization of memory and CPU usage for various load levels.
- Optimization of network usage (bandwidth and latency) with Wireshark (formerly Ethereal) and IBM Page Detailer.
- Interfacing with legacy 4GL libraries with Apache TelnetClient.
- Testing and proof of concept for a better version control system (from PVCS to Subversion).

- Configuration and optimization of Apache HTTP Server.
- Design and development of the persistence layer (ORM) of the framework.

Technologies: **Java 1.5 and 1.6 (Sun and IBM), JBoss/Tomcat (J2EE, EJB, JSP, Servlet), JProfiler, Heap Dumps (JMap, JHat, HeapAnalyzer), Wireshark, Ethereal, tcpdump, JConsole, JAXB, JAX-WS, XML, XSD, Quartz, DBCP, Apache HTTP Server, Clustering (mod_jk), JDBC, JMS, Oracle, Informix, Unix (AIX, GNU/Linux), Ant, MyEclipse, PVCS, Subversion.**

August 2004 – March 2006

Morgan Stanley (Compuware)

Java Developer

- Development and maintenance of the new financial transactions system named FIDA. This new global application replaces a legacy system. The traders at Morgan Stanley in NY, London and Tokyo use this new distributed application. My work is on the server side which consists of several distributed java services running on Linux servers.
- Applications must be adapted as soon as possible to new requirements. In this context, a delay of few days often leads to considerable losses for the company.
- Work under pressure, eagerness for new features and releases (one release a week).
- Distributed services communicating mainly with SOAP and MQSeries (asynchronous).
- Participation in the architecture and development of the data replication layer for all regions (NY, London, Tokyo).
- Architecture and development of the server data synchronization layer with the client software.
- Design and development of an XML wrapper helping reduce programming errors.
- Investigation and resolution of performance issues with JProbe.
- Development of several features and bug fixes.

Technologies: **Java, Sun/IBM JVM 1.4.2, JXB, CPS, Tomcat, Ant, Castor, JDBC, TCP/IP, SOAP, MQ Series, XML, XSD, XSLT, XPath, SQL, Sybase, JProbe, Autosys, GNU/Linux, Perforce, Eclipse, etc.**

December 2002 – August 2004

Logient Inc. (Alogient)

Java Developer

- Participation in the development of various web applications from CMS to CRM.
- Responsible for the BellBundles project, a B2C E-Commerce dynamic web application. BellBundles is deployed on the web and allows anyone to order, upgrade and bundle various Bell services online (internet, mobile phone, digital satellite TV). Orders contain sensitive information (credit card numbers, personal information, etc.) that must be sent to Bell in a secure way (SSL). Complex and custom business logic. HA with a Load-Balancer. High-performance and very robust design to withstand very high traffic loads. Fast response time.
- Architecture and development from A to Z Project BellBundles: Persistence Layer, Servlets, JSPs, dynamic price calculation module, interface with the high speed eligibility system, html/javascript, version management and special promotions, development several versions at a time.
- Participation in the development of many CMS sites including Heenan Blaikie, Music Plus and City of Montreal.
- Participation in the design and development of many custom online contests for Music Plus, Base

Concept Beverage and others.

Technologies: **Java (J2EE), Sun/IBM JVM 1.3 and 1.4, Ant, JDBC, Servlet, Jsp, Taglibs, JavaBeans, XML, DTD, XSLT, XPath, Tomcat, Resin, SQL, Oracle, PostgreSQL, IIS, Apache, Unix, Windows, Html, Javascript, Http, Https, SSL, SOAP, CVS.**

May 2002 - December 2002

**Institut de Recherche
d'Hydro-Québec (IREQ)**

Consultant

- Participation in the development of a prototype submarine robot designed for the inspection of hydroelectric dams. Development of the positioning system of the robot.
- Programming C++ on RTOS (QNX6).
- Using specialized libraries (MICROB) to develop robots.
- Implementation and adaptation of complex algorithms (Kalman Filter).
- Participation in the development of the MICROB library.
- Created the setup program for the MICROB library with InstallShield for Visual C++.
- Travel participate in inspections contracts and tests with the submarine robot.

April 2001 – August 2001

Canadian Space Agency (CSA)

Intern

- Building a testbed with laboratory equipment for testing RF satellite communication devices.
- Development with the laboratory research languages such LabView and MatLab.
- Using GPIB ports to communicate with the laboratory equipment, high frequency A/D sampling devices (1GHz), arbitrary waveform generators, network analyzers, spectrum analyzers, RF devices (Mixers, power dividers / combiners, hybrid couplers , etc.).

Academic

Diploma obtained: May 2002

**École Polytechnique
de Montréal**

Bachelor degree in Electrical Engineering, Telecommunications (B. Ing.)

- Cumulative average of 3.8 (maximum is 4.0 at Polytechnique).
- Mention of Excellence from the Director General.
- Scholarship for academic excellence.
- ICT Scholarship.

Diploma obtained: May 1998

Cégep Saint-Jean

Pure and Applied Sciences

- Academic mention of sciences.

Diploma obtained: June 1996

High School

High School Diploma

- Diploma obtained with General Governor's Medal. This medal is awarded to the graduate who obtained the highest GPA among all graduates.

References

- References are available upon request.