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As a Solutions Architect, I have over twenty five years of technical and management experience in software development and engineering for the Canadian Air Force and in industry. I am an expert in the areas of software architecture, design, development, the deployment of large-scale software applications, and enterprise middleware applications. My special focus has been in the area of software task scheduling and resource allocation. Over the years, I have been involved in a number of large projects, from the design and development of a frequency management system for the Canadian Arctic Radar systems, to Technical Lead/Project Manager for the modernization of the NORAD Canadian Air Command and Control System. I have also worked in the area of Artificial Intelligence. Most recently, I have re-worked the entire point of sale system for Urban Outfitters Inc (over 300 stores), and I have also been the architect and project manager for the implementation of PCI compliance software at Urban Outfitters. My current endeavors include: developing a Service Oriented Architecture (SOA) framework at Urban Outfitters using the TIBCO ESB, and designing a revolutionary server provisioning system using Grails and Groovy.

Summary Highlights

Java Expertise

Java technologies - JNI and Reflection. TCP/UDP Networking, Application servers, Rational Rose and Enterprise Architect (UML modeling), eXtreme Programming, Performance analysis and tuning of real-time systems. JBOSS, IBM WebSphere MQ, IBM WebSphere Application Server, DB2, MySQL, Oracle Retail Systems, SUN Solaris 10, AIX 5.3, Linux SuSE 8, 9 and 10.

Software Dev. Expertise

Program Development / Solution Architect, Java/J2EE, Groovy, Grails, XML, Eclipse toolset, C/C++, X Windows, programming, Java Reflection and JNI, development, JOVIAL, CTree+).

Management Experience

Officer in the Canadian Military (24 years), Manager, Solution Architect, Technical Lead.

Industry Expertise

Web Application Server deployments and programming. TIBCO Enterprise Service Bus, Retail POS Systems, Application porting, software migrations and Legacy Software transformations, Real-time Command and Control Systems software development and maintenance. Member of IEEE and ACM

Positions Held

Military Officer, System Architect, Senior Systems Analyst, Technical Program Manager, Lead Architect and Technical Lead

Education

- College diploma in Business Administration (Petit Seminaire de Quebec, 1977)
 - Certificate in System Analysis and Design (St-Mary's College, Halifax, Nova Scotia, Canada through the Canadian Armed Forces).
 - Certificate in Software Development and software lifecycle methodologies at the Air Force Institute of technology (AFIT)
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Relevant Experience

Employer - Urban Outfitters Inc. (2006 - Present)

Industry – Retail

Project Scope

Update the aging retail POS hardware and software with more up-to-date and flexible POS system ([Oracle Retail](#)). Upgrading the POS Home office systems and implement a system wide PCI compliance project. Initial Design and installation of the test ECommerce systems in Solaris/JBOSS/ORACLE 10g. Design and deployment of a new Service Oriented Architecture at Urban Outfitters based on the [TIBCO Business Works ESB](#) and [TIBCO Business Connect \(B2B Portal\)](#).

Specific Role

System Architect, Senior Software Analyst, System Administrator.

Results

The POS upgrade deployed over 250 stores all across the US in a period of 3 months. This was an extremely successful project and the system has already saved Urban Outfitters Inc. millions of dollars in credit card processing and has also allowed the stores to start using gift cards. This was also the first successful deployment of the IBM Retail Store Integration Framework version 2. In addition, to the basic system, we also deployed a revolutionary remote monitoring and control component completely designed in house. The monitoring component checks business processes as they should be happening which indicates failures with software components by logical deduction. The TIBCO project is currently in progress and will prove invaluable in re-using data and processes throughout the company.

Employer - Castor Technologies Inc. (2004 - 2006)

Industry – Software and IT Support, Software Porting, Migration and System rejuvenation.

Project Scope

Designed and deployed state of the art automated Knowledge Based System used to port any software in any language to any other to any other language automatically without human intervention. ([IRIS](#)) This application was written in Java.

Specific Role

Project Manager / Technical Lead.

Results

The first version of the IRIS application designs were completed and ready for implementation on schedule. [IRIS](#) will enable virtually anyone to port complete applications for platform to platform flawlessly with no human intervention.

Employer - Canadian Military, NORAD System Support Facility, (1996 - 2004)

Industry - Government - Canadian Air Force

Project Scope

In cooperation with the NATO Programming Center, I was responsible for the design, develop and deploy a modernized air defense system capable of tracking for the US and Canada. The system ([MASE](#)) was capable of identifying and guiding the interception over 10,000 flying objects simultaneously. The system employed over 64 user consoles from which all users could direct the control and identification of any airborne object within the USA and Canada.

Specific Role

Project Manager / Solution Architect / Team Lead

Results

This project was completed on time. The first version enabled Canada and the US to completely take over all air operations over the North American continent from the legacy system. The system had a 99.98 percent availability requirement which was met through distributed applications and function monitoring of the system by a Managed Object Monitor (MOM). Components that were inoperative were detected within 12 seconds and re-started automatically by the system.

Employer - E-Brain Solutions LLC., (1998 - 1999 (Part-time work))

Industry - Artificial Intelligence, Java Development

Project Scope

Responsible for the creation of the Java to CTree+ Database component of an AI personal digital assistant.

Specific Role

J2EE / CTree+ Database Interface specialist / Linux Specialist

Results

Designed and implemented the Database development effort using CTree+ and Java Reflection and JNI technologies. Within four months we had a functioning database of a revolutionary design that saved Java objects and all their relations in a CTree+ database. The design allowed for a single call to save one object to also save all the related objects with their appropriate states. It was paramount that the AI never forgot a command given or an object (such as a contact) already described by the user. This was the first, to my knowledge, truly Object Oriented Database.

Employer – Canadian Norad Region, 1990-1996

Industry - Government - Canadian Air Force

Project Scope

Created and lead a team of experts into finding software anomalies in the real-time component of NORAD air defense software and to resolve those issues.

Specific Role

Senior System Analyst / Team Lead

Results

Found and rectified over 1000 known software anomalies in the legacy NORAD Air defense software. Created a software modification that extended the useful life of the system by a minimum of 10 years. I completely re-designed the Graphical User Interface communications component to make it more efficient and easier on the real-time scheduler in the central processor. Re-design the real-time Operating System (OS) architecture to correct major flaws in the scheduler and improve it's efficiency.

Hobbies

Martial Arts (Black Belt - Karate), Gaming, Running, Contributor to the open source projects .

