

## **Pawel Michalowski Resume**

### **IT Related Experience**

**15 years**

### **Security Clearance**

Secret (Level II) (File#: 95195871-0000264669)

### **Languages**

English, Polish, Russian, learning French, Spanish, Mandarin

## **Profile**

Mr. Michalowski has over 15 years of solid application & web architecture, development and design experience on Microsoft Windows platforms, including team management and project planning. His technical skills include:

- Web and desktop application architecture, and development using Visual Basic 6 (COM/COM+), Active Server Pages Scripting (ASP with MS IIS server, Apache, Weblogic, JRun), Visual Studio .NET (VB.NET, ASP.NET, C#), JavaScript, VBScript, XML, XSLT, XMLDOM, SOAP, Perl, PHP, JBuilder (JAVA, JSP) utilizing a [REST](#)-style architecture incorporating enterprise class client server web based applications.
- Experience in PKI implementation strategies using Entrust PKI products (TruePass, ProfileSever, AutoRA and Manager). Vast knowledge of enterprise software deployment mechanisms. Solid experience in web content management, architecture and e-Business solutions using OpenText LiveLink.
- Solid background in Object Oriented Programming (OOP) and architecture utilizing UML, using Visual C++, C#, Delphi and C++ Builder.
- Event Oriented Programming (EOP) using Rapid Application Development (RAD) platforms such as Visual Basic, VB.NET, and Delphi.
- Computer Telephony Integration (CTI), design & architecture on Dialogic, Rhetorex and PIKA hardware using Pronexus VBVoice platform for Visual Basic. Knowledge of signaling protocols, call control and software switching. Understanding of media gateway architecture and IP based network infrastructure.
- Database architecture & integration using MS SQL, Oracle 9i, MySQL & MS Access. DB design strategies, PL/SQL stored procedure implementation, data formatting techniques utilizing XML DOM. Real-time, multi-tasking software development experience using ClearCase, MS Visual Source Safe, WinCvs.
- Experience using problem reporting tools (Problem Reporting Systems) such as Remedy, ClearCase PRS, Rational Rose PRS, LiveLink Workflow, as well as many custom 3rd party PRS systems built on MS IIS and Apache HTTP Servers.
- Working knowledge of OLE Automation Technology (COM, COM+, MTS), Win32 API programming, ActiveX, MAPI, TAPI, SAPI, ADO, DAO, ODBC.
- Software development using Kofax Capture (formerly Ascent Capture) and Kofax VRS (Virtual Re-scan) SDK. Hardware interfacing with Fujitsu and other Twain compatible scanners.

Mr. Michalowski possesses a security clearance at the Secret level.

## **PROFESSIONAL EXPERIENCE**

## **Project # 1**

### **Rogers Television**

#### **Senior Software Architect / Systems Analyst**

**September - October 2010 (2 months)**

#### **Project Description:**

Rogers Television was responsible for broadcasting live 2010 New Brunswick Provincial Elections (Sept. 27<sup>th</sup>, 2010) and Ontario Municipal Elections (Oct. 25<sup>th</sup>, 2010). The system used for this purpose comprised of several custom build components, each having a specific task. “XML Parser” – VB.NET application used to download election results in XML format and populate MySQL DataBase. “Ticker” – VB6 application interfacing with Insciber RTX module to display election results in a scrolling ticker on the bottom of the TV screen. “Graphics” – VB6 application interfacing with Insciber RTX module to display election results on a full TV screen. “BL Elector (DCI)” – ASP.NET web application used to manually administer the election results in case of live feed failure.

#### **Tasks Performed:**

- Architected network infrastructure to combine all software components into a single election “system” including designing and developing of web services interfaces
- Developed and tested REST based web services with HTTP and XML including SOAP based web services and XML data feeds.
- Performed software analysis and testing to ensure error free operation on election day.
- Provided coordinated detailed feedback to the development team to ensure prompt bug fixes.
- Coordinated deployment of all the components through various TV stations in NB and Ontario
- Assisted users in remote locations via remote control using join.me and BeamYourScreen
- Provided assistance and system monitoring on the night of the elections.

## **Project # 2**

### **Royal Canadian Mounted Police (RCMP)**

#### **Operations & Corporate Applications Development Branch**

#### **Senior Software Architect / Systems Analyst**

**August 2009 – August 2010 (12 months)**

#### **Project Description:**

RCMP has identified a need to have an automatic file management system that would be able to deliver scanned images from a scanning workstation to a file server for permanent storage. After gathering electronic Major Case Management (eMCM) user requirements, the Operations & Corporate Applications Development Branch (O&C ADB) and the eMCM Policy Centre have developed a new

Evidence and Reports (E&R) Scanning component. It consists of the E&R Scanning program (workstation) and an E&R Scanning Back-End service (server).

The E&R Scanning program is used to scan documents into E&R. When the documents are scanned, the images are saved. After the user reviews the scanned images, the image files are copied to the file server. The E&R Scanning Back-End service then provides a copy of the image files to Adobe Capture workflow, which in turn creates a searchable PDF file for each scanned document. Once created, the PDF file is moved to the specific project's folder.

### **Tasks Performed:**

- Architected, developed, programmed, maintained and unit tested code wide implementation of an error handling and debug logging objects, using VB6, VB.NET and ASP.NET from UML diagrams, including designing and developing of web services interfaces.
- Interfaced with Kofax Capture and Kofax VRS (Virtual Re-scan) Visual Basic SDK in a custom application E&RScanning, designed to scan police investigation evidence documents into a SQL database
- Developed requirements, feasibility, design and specification documents for MS SQL Server 2005, 2008 assessing long term usability and cost
- Architected, developed, programmed, maintained and unit tested an advanced Annotation and Endorsement feature, which allows the scanned documents to be stamped physically (scanned paper) as well electronically (scanned image)
- Using [COM](#) interfaced with various scanners including Fujitsu and other Twain compatible scanners, such as hand held scanners
- Created several post-processing support tools to aid production release and enhanced customer feedback as part of a software development life cycle
- Assisted with 24h customer support during 2010 Olympics and G8-G20 Summits
- Consulted on many technical and operational aspects of the E&R application suite including writing software coding standards documents.
- Updated E&RScanning User Guide including screen captures and step by step instruction
- Translated business requirements into software and database systems design and specification through various meetings with clients. Providing Proof-Of-Concept demos/prototypes to help clients create their perfect project solution.
- Managed project source code, documentation and bug reports using Source Integrity
- Architected, developed and tested REST based web services with HTTP and XML including SOAP based web services and XML data feeds on a Weblogic web server.

### **Project # 3**

**Department of National Defense (DND)**

**Center for Operational Research and Analysis**

**Senior Software Architect / Systems Analyst**

**November 2008 – June 2009 (8 months)**

**Project Description:**

“Tyche 2.3”: Development & Maintenance. Tyche is a stochastic simulation model that schedules the deployment of assets within a fleet to address a set of mission scenarios. In order for the program to be effective, it is necessary for the user to understand the nuances of the input and output.

**Tasks Performed:**

- Architected, developed, programmed, maintained and unit tested a code wide implementation of an error handling object, writing to a Windows Event Viewer using VB6
- Developed an integrated HTML Help file support for the software using RoboHelp 7, CLF2, in an enterprise WAN environment
- Developed technical specifications for Tyche 2.3 software development, design and implementation (on line reference: <http://pubs.drdc.gc.ca/PDFS/unc89/p532269.pdf> ) including future software standards.
- Added functionality to post-processing tools using Windows API wrapper and VB6
- Separated the code so that the program follows a model-view-controller architecture for future use in a parallel processing environment using VB6
- Adhered to the strict timelines of this project which outlined client’s software development life cycle
- Translated business requirements of the Canadian Fleet into software design and specification through various meetings with a client. Providing Proof-Of-Concept demos/prototypes to help the client create their perfect project solution.
- Worked on a VB6 to VB.NET conversion prototype to assess the impact of time and budgetary constrains of future development.
- Managed project source code, documentation and bug reports using MS Visual Source Safe
- Developed and tested REST based on-line help for Tyche using with HTTP, XML, SOAP on a Apache HTTP server, including designing and developing of web services interfaces.

**Project # 4**

**Bell Canada**

**Manager, IS/IT Database Design, Development & Maintenance**

**Regulatory Affairs - Electronic Regulatory Information Kiosk**

**Senior Application Architect / Systems Analyst**

**September 2004 – August 2008 (4 years)**

**Project Description:**

The Regulatory Affairs department of Bell Canada advocates the interests of the organization before

CRTC hearings and other reviews by governmental agencies. As such, the department must manage all documentation related to the awarding of broadcasting licenses, the approval of tariffs, and the review of corporate mergers and acquisitions. Regulatory Affairs was being hindered in its critical mandate by the lengthy process of gathering records, in paper format and otherwise, scattered across Bell and its family of companies. The ERIK project fully automated the process taking Bell's Regulatory Affairs well into the 21st century.

## Tasks Performed:

- Architected, developed, programmed, maintained and unit tested Regulatory Affairs Intranet web site in a strict software development life cycle. Performed custom web development using ASP.NET, VB.NET, XML/XSLT, CSS, Windows API programming, VBScript, JavaScript, Cascading Style Sheets on Win2003, MS IIS6, FTP combined with Bell's BellNet architecture. Coordinated and gathered content from various people within the department responsible for their area of regulatory affairs.
- Developed and tested REST based web services for Bell Canada's Intranet using HTTP, XML, SOAP based web services on a MS IIS web server.
- In VB.NET (Microsoft Visual Studio .NET 2003) architected, developed, programmed, maintained and unit tested Webload (custom FTP application) used to administer Bell Canada Tariffs Internet Web site. Maintained accurate data in the tariffs database, analyzed, troubleshoot and provided helpdesk support when required. With growing requirements to maintain older technologies created additional Webload modules (using VB6 for legacy systems) to manipulate data on the SQL Server, to correct, update or transfer data. Wrote SQL queries and stored procedures in a Microsoft SQL Server 2003 environment.
- Using VB6 architected, developed, programmed, maintained, unit tested and fully implemented RISBackup application in response to a need to backup individual user working files. Created a solution where the users could run it directly from a single server location.
- Project Density: Using Visual Basic for Applications (VBA), created several MS Word macros to automate document conversion processes, to save user time. Created a new VB.NET software application designed to speed up the process of adding versions for the "unsearchable" records in RIS Library. Using VB6 created, developed, programmed, maintained and unit tested a DOCMerge software for quickly combining 100's of MSWord documents and converting them into a single PDF file.
- Architected, implemented and maintained ERIK (Electronic Regulatory Information Kiosk). ERIK solution is based on OpenText's LiveLink 9.5 server (utilizing enterprise WAN architecture) with customized user modules written using LiveLink OScript. Ran daily backups, updated the OS and virus scan software, created and managed users, user groups, file access & permissions, ran daily ERIK database exports. Ensured minimal server downtime (< 1%). Imported old data from a Unix based Apache HTTP web server and LiveLink 7.0
- Translated business requirements and needs of RIS into software and database systems design and specification through various meetings with clients. Providing Proof-Of-Concept demos/ prototypes and or PowerPoint presentations to help clients create their perfect project solution.

- Provided day to day Support for all Regulatory Users. Supported different modules associated with Livelink software: RIS, TAPS, ROBOT (automated check-in/check-out Windows Service utility written in VB6 later converted to Visual Basic .NET), SAC and ORS modules. Created BC4141 requests (technical job requisitions) for the department. Helped users with issues concerning: mapping network drives, MS Office applications, connectivity to printers and BELL domain, using various software packages. Provided MS Outlook support including creation of several HOW-TO documents and videos. Created and supported RIS Backup utility for personalized user backups. During Local Forbearance application I have assisted in scanning several documents, and placing them into multiple binders.
- Programmed in OpenText LiveLink 9.5 and 9.7, and Windows environment under tightly scheduled software development life cycle. Re-programmed and optimized Webload to upload Tariff Pages to the Internet website. Re-programmed and optimized Checkout utility for the Tariff Group (Utility that allows downloading many pages at the same time including the folder and checking them out from Livelink automatically).
- Documented several in-house built applications. Created comprehensive and complete documentation explaining how and why the code is built, what software was used to build it, as well as how to use those applications.
- Developed technical specifications for various software and database systems including their initial design, implementation and interface specifications. Helped writing software standards documents.
- Developing requirements, feasibility, design and specification documents for various MS SQL and Oracle servers in conjunction with our internal Livelink server needs. Projecting and planning database server upgrades from one technology to another, ie: from Oracle to MS SQL and vice versa.
- Participated in configuring and using Kofax Ascent Capture and Kofax VRS (Virtual Re-scan) application suite to scan legal documents into an Oracle database and ERIK. Extensive knowledge of various scanners including Fujitsu and other Twain compatible scanners, such as hand held scanners.
- Managed project source code and documentation using OpenText LiveLink 9.5 Workflow.

## **Project # 5**

### **Espial Group Inc.**

#### **Espial Escape Macromedia Flash Plug-In Integration**

##### **Senior Software Architect / Systems Analyst**

**May 2004 – June 2004 (2 months)**

### **Project Description:**

Espial Escape™ is the first browser Java SDK to offer a scalable configuration matching the memory requirements of a wide range of resource-constrained devices. With support for key Internet standards (including HTTP, SSL, HTML4.0, JavaScript, XML/XSLT and CSS) and multimedia, Escape provides a full-featured browsing experience with a small core footprint. The project: client's requirement for

integrating Espial Escape 5.1 with a Macromedia Flash Player Plug-in.

### **Tasks Performed:**

- Win32 API programming using MS Visual Studio C++ 6.0 in an enterprise WAN environment
- Utilizing technologies such as ActiveX, COM, ATL
- Win32/JAVA port of the ActiveX using MSJ++ 6.0
- Modifying Macromedia Flash Player Plug-in source code to make it work with Espial Escape, Java based browser utilizing a fast paced software development life cycle.
- Testing the final product using Acceptance Test Suite (ATS) from Macromedia
- Developed (wrote) a technical specification document covering the configuration and design requirements for building the custom Macromedia Flash Player Plug-in including its initial design, implementation and development
- Managing project source code and documentation using WinCVS and MS Visual Source Safe.
- Developed, tested and provided a demo of REST based web service, using HTTP, XML, SOAP based web services for the Flash Player plug-in.

### **Project # 6**

#### **HRDC**

**Common System for Grants & Contributions (CSGC) PLC development team**

**Sr. Software Architect / Systems Analyst / Web Developer**

**July 2003 - April 2004 (10 months)**

### **Project Description:**

Grants are unconditional transfer payments which are not subject to being accounted for or audited but for which eligibility and entitlement may be verified. Contributions are conditional transfer payments for a specified purpose, which are subject to being accounted for and audited pursuant to a contribution agreement. The purpose of this project is contribution agreements. Contribution agreements are undertakings between a donor department and a prospective recipient of a contribution, which describe the obligations of each. This web application is utilizing such technologies as COM+, ASP, ASP.NET, JavaScript, VB6, VB.NET, HTML, MTS, MS Visual Source Safe, Windows NT, Windows 2000, Oracle9i database, Object Oriented Programming, XML/XSLT, XSL, SOAP, CSS, SQL.

### **Tasks Performed:**

- Visual Basic (VB6) development in re-designing current version of CSGC PLC module to fit the new code implementation standards (XML/XSL/CSS/SOAP), in a MS Visual Source Safe development environment.
- REST-full HTML design of new and redesign of existing CSGC PLC module web pages.
- Architected a web-service component called "Subsidies and Contributions" which was part of

the Grants & Contributions System. “Subsidies and Contributions” was built for evaluating user qualification criteria for either a subsidy and/or monetary contributions to be received from the Canadian Government. Technologies utilized in building this component were VB6, WebServices 1.0 with XML/XSLT/SOAP technologies on a MS IIS server.

- Visual Basic (VB6) development, combined with ASP and JavaScript scripting in designing of the CSGC PLC module in a fast moving software development life cycle
- PL/SQL debugging on the Oracle9i database as part of system integration, writing of SQL queries and stored procedures in a Oracle9i and Microsoft SQL Server environment
- Successfully converted several existing VB6 class modules into a new coding standards
- Developed requirements, feasibility, design and specification documents for both Oracle9i and Microsoft SQL Server environments, including writing software standards documents.
- Wrote several new VB6 COM+ components for the CSGC PLC module
- Debugged and fixed several existing issues within the application
- Designed new REST-full HTML/ASP pages for CSGC PLC module (Notes to File, etc)
- Developed (wrote) a technical specification document covering the configuration and design requirements for building various components of the CSGC application, including their initial architecture design, implementation and development
- Helped to re-write the CSGC application into a working prototype using VB.NET and ASP. NET to alleviate some of the ongoing limitations of VB6 and ASP technologies.
- Managed project source code, documentation and bug reports using MS Visual Source Safe and Rational Rose PRS system
- Architected, developed and unit tested REST-full HTTP web pages which used XML/XSL/XSLT/SOAP

### **Project # 7**

**BCE, Emergis Inc.**

**RGBB - Registrar General Buy Button (e-commerce web service)**

**Software Architect / Systems Analyst / PKI Specialist**

**January 2003 - July 2003 (7 months)**

### **Project Description:**

Secure Channel development team. BCE Emergis is a leading North American e-Business company enabling specialized transaction processes for the health, finance and government sectors. BCE Emergis supplies solutions to businesses that automate transactions between companies and allows them to interact, and transact in real-time. Its leading technologies are centered on claims processing, electronic bill presentment and payment solutions. While working at BCE Mr. Michalowski strengthened his technical skills in: Java/C++/Delphi/Perl development as well as in the area of PKI implementation and integration, including Secure XML (XML Encryption). At the same time he brought forth his expertise in VB6, ASP and JavaScript/VBScript as a means to find an ideal solution for the RGBB project.

### **Tasks Performed:**

- Software architecture and development of PKI monitoring tools (PKI Monitor, ICMP Ping, TCP/IP Pocket Send test) using Visual Basic 6 (VB6) , in a MS Visual Source Safe development environment
- Using VB6 converted existing PKI log parsing tools formerly coded in Delphi, Java and Perl to ensure future ease of use and maintenance.
- Architected, designed and developed an Audit Trail Automation solution prototype using VB6, for the federal government. The purpose of the ATA was to secure the non-repudiation aspect of e-commerce transactions handled by or for the federal government to prevent e-commerce fraud.
- Architected, designed and developed an automated software deployment package using InstallShield.
- Successfully designed and integrated the VB6 ATA solution with Perl to embrace its power with Regular Expressions.
- Played an integral part in the development of automated deployment of several Secure Channel solutions using InstallShield
- Using MS Visual Studio VB6 developed a PKI monitoring software which was successfully deployed on the production environment
- Wrote several support and design documents according to government templates. Developed technical specifications for various software including their initial design and implementation, including writing software standards documents.
- Translated business requirements into software and database systems design and specification through various meetings with clients. Provided Proof-Of-Concept demos/prototypes and or PowerPoint presentations to help clients create their perfect project solution.
- Adhered to the strict timelines of a software development life cycle backed by frequent status update meetings with other team members.
- Provided input for the progress of PKI implementation on various Secure Channel projects.
- Managed project source code, documentation and bug reports using MS Visual Source Safe
- Architected, developed and unit tested REST based e-commerce RGGG web service with HTTP and XML/SOAP

## **Project # 8**

### **Bestlane Incorporated**

#### **EZWeb Monitor Application Development**

#### **Software Architect / System Analyst / Web Developer**

**April 2003 – April 2004 (1 year, 1 month)**

### **Project Description:**

Customer required monitoring of the Maersk Sealand website (and other identical sites) for content changes. This website provides rules and rates corresponding to shipments from ports in the forty-eight contiguous states of the United States.

## Tasks Performed:

- The monitoring (web scrapping) tool was developed using a COM+ interface to the MS Internet Explorer to be able to login to the website automatically, handle the site session and retrieve and compare data as specified for each phase of this project. This had to be performed because the company did not have direct access to the databases containing all the vital info other than through a web interface. Automation of the process was necessary due to the extremely large amount of data to be verified daily. The results of the tool's query are communicated to the user via automatic email notifications (SMTP, POP3) based on user configured recipients.
- The tool retrieves the text for any given rule and compares it with a previously stored copy. If a change is detected, the tool can send an email notification (including a difference from the comparison) to the user, or store the information in a local MS Access database. Only rule content changes are monitored, i.e. HTML code, images, banners and other non-rule related content are ignored by the tool. The tool also monitors if a new rule has been added to or subtracted from a given tariff. This involves retrieval of all rule numbers in a given tariff and then comparing with the previously stored copy of this list. If a rule has been added or subtracted to a tariff the two lists will differ and an email notification will be triggered. All these actions are performed via COM+ interface to the MS Internet Explorer. These are: logging into the specified web site, auto-entering search criteria, waiting for search results and retrieving data, "clicking" through multiple pages if the search result returned more than one page. All actions of the tool were fully automatic and did not require human supervision. Technologies mainly used were Object Oriented Programming (OOP), Windows system API programming (Win API), XML, XSL, ASP, ASP.NET, HTML, VB6, VB.NET, COM+, DCOM, MS Access, and Delphi 5 & 7. Strict software development life cycle timelines were utilized in order to deliver a quality product on time. Developed technical specifications for the client as means to demonstrate what can be done to provide a needed solution. Wrote various separate software technical specifications, including its initial design and implementation on a module by module bases.
- Managed project source code, documentation and bug reports using 3<sup>rd</sup> party online internet based Source control system
- Developed and tested REST based web on line help for EZ Web Monitor using HTTP, XML/XSL/SOAP.

### Project # 9

#### Arkosoft Technologies

**Software Architect / System Analyst / Web Developer / IVR Integrator**

**November 2001 – March 2004 (2 years, 5 months)**

#### Project Description:

Architected and developed several "computer telephony integration" (CTI) applications for automation of 800 number response campaigns. Using the phone and the web as call-to-action response vehicles,

the applications can track market responses generated from any electronic or print media campaign. The tools/technologies used were VB6 (COM+), ASP, HTML, JavaScript, MS Access, MS SQL Server, Windows 2000 Pro Server, VNC for remote system administration. Also worked on the development of the following computer telephony projects adhering to “project specific” software development life cycles.

## **Tasks Performed:**

- Interactive Voice Response (IVR) - Application providing a telephony interface for callers to interact with computer databases using touch-tone keys (DTMF) or voice commands (Speech Recognition). I have integrated 3rd party applications to interface with external databases. I have helped to provide clients with a host of reporting tools including automatic regular report generation of call statistics or customer data specific to their application.
- Auto Attendants / VoiceMail - Application designed to answer calls and route a caller to a specific extension, department, with the ability to leave messages. I have implemented customized Auto-Attendants and VoiceMail systems that met client’s unique requirements including Speech Recognition.
- Speech Recognition Applications - Word and phrase recognition in which a system is trained to recognize words or phrases and to respond appropriately by routing the call, giving appropriate information, etc. Implementing Speech Recognition into client’s application provided their customers with the flexibility of using their voice in situations where keypad input is not effective, such as cell-phone usage from a vehicle.
- Fax-on-Demand - Also called Fax Back, allows callers to request documents in an information base to be faxed to them by selecting a specific document from an automated menu.
- Text-to-Speech Applications (TTS) - used to convert text information into synthetic speech output. This technology is very useful and I have implemented it for some clients where client application required large volumes of variable information to be delivered to the caller, and in situations where it was not possible to provide pre-recorded message playback. Typical applications included address information delivery, or email reading capability.
- Help-Desk: “Call Center Applications” - centralized location (or contact-center) where queries about products, services, and problem reporting are answered. I have worked on a custom IVR application including Screen-Pop technology which reduced call times and made client’s agents more productive. Our IVR front-ended call center solution managed the retrieval of critical information from the caller as well as information retrieval from customer databases (MSSQL, MS Access, Oracle). This information was linked to the call and "popped" to the agent upon transfer.
- Outbound Telemarketing Application - An automated outbound calling system placing calls to customers stored in MS Access DB, in order to provide marketing information and/or retrieve information from callers about product preferences/customer experience etc. Our IVR system was effective in calling out to a large number of customers to survey and retrieve valuable information about client company's products and services. In addition statistical analysis was made regarding the information that was retrieved from the calls and provided back to the client in easy to read reports.
- “Auto-Dial”, “Preview” & “Predictive Dialing”: An automated application capable of making

large quantities of outbound calls from MS Access DB. In a preview dialing application the agent can preview the customer information before the call is made. Our predictive dialing application placed automated outbound calls and passes answered calls to agents along with a customer information screen.

- Wrote several, technical specifications, for various software including their initial design, implementation as well as continued update to those document during evolution of the products.
- Managed project source code, documentation and bug reports using MS Visual Source Safe.

## **Project # 10**

### **Human Resources Development Canada (HRDC)**

#### **EIAppliWeb**

**Software Architect / Systems Analyst / PKI Consultant / Web Developer**

**July 2001 – December 2002 (1 year, 6 months)**

#### **Project Description:**

EIAppliWeb was a pilot project part of the Government of Canada's GOL initiative, and is now used nation wide by all Canadians applying for EI on line (ref: [http://www.rhdcc-hrsdc.gc.ca/eng/cs/comm/news/2002/020528\\_e.shtml](http://www.rhdcc-hrsdc.gc.ca/eng/cs/comm/news/2002/020528_e.shtml) ). This web application utilized such technologies as Visual Basic 6 (VB6), COM+, ASP, JAVA, JavaScript, VBA, HTML, MTS, Windows NT, MS Visual Source Safe, Windows 2000 and Oracle8i/9i. Currently converted to .NET technology.

#### **Tasks Performed:**

- Architected and implemented electronic signing capabilities into EIAppliWeb using Entrust/TruePass
- Visual Basic (VB6) development in re-designing current version of EIAppliWeb to fit the new implementation with Entrust/TruePass, in a MS Visual Source Safe development environment.
- Visual Basic (VB6), ASP development and JavaScript scripting in designing of the Interactive Fact Finding System (IFFS) part of EIAppliWeb, later converted to .NET technology (ASP.NET, ADO.NET, VB.NET). Followed strict software development life cycle time lies and dead lines.
- Successfully integrated the back end solution for the application using VB6
- Architected, developed, programmed, maintained and unit tested a VB source code parsing tool in order to clean up an existing source
- Architected, developed, programmed, maintained and unit tested VB COM+ components for the Interactive Fact Finding System (IFFS) portion of the EIAppliWeb application
- Using VB6 and Rational Rose UML design architected developed, programmed, maintained and unit tested a robust application logging mechanism allowing to log application events, warnings and errors into Event Viewer (NT/2000), text file or Win32 OutputDebugString console.
- Started converting the first release of EIAppliWeb application into .NET
- PL/SQL debugging on the Oracle9i database as part of system integration.

- Developed and wrote requirements, feasibility, design and specification documents for the EIAppliWeb database server needs based on Oracle9i infrastructure, including writing software standards documents.
- Java (JBuilder4) development creating an Entrust/TruePass, transaction signing, back end implementation for EIAppliWeb.
- Modified TruePass Concrete Transaction System to meet electronic signing needs of EIAppliWeb.
- Built the IFFS (Interactive Fact Finding System) used for matching specific user work experiences to the possible EI benefits they were going to receive, which utilized Web Services 1.0 with XML/XSLT and CSS technologies
- HTML design of new pages to be involved in the transaction signing.
- Documented the EIAppliWeb application flow with respect to PKI implementation.
- Documented the PKI implementation within EIAppliWeb. Developed technical specifications for the entire EIAppliWeb software and its supporting database systems including their initial design and implementation.
- Wrote an EIAppliWeb Installation Guide, and developer's software writing standards documents.
- Successfully built Entrust/TruePass transaction signing backend implementation using JBuilder4 (this included transaction log generation and saving the signed transaction into a file on the TruePass server)
- Provided input for the progress of PKI implementation in the EIAppliWeb to the team members.
- Attended the Secure Channel meetings with regards to overseeing and providing the input for the progress of PKI implementation in EIAppliWeb.
- Gave advice on Entrust/TruePass and other e-commerce technologies, and or products.
- Managed project source code, documentation and bug reports using MS Visual Source Safe and Rational Rose PRS system.
- Developed and tested REST based web services for EIAppliWeb with HTTP and XML including SOAP based web services and XML data feeds.

## **Project # 11**

**Entrust Technologies, Ltd.**

**Entrust Enterprise Desktop Solutions (Entrust Desktop Designer)**

**Software Architect / Systems Analyst**

**February 1998 – June 2001 (3 years, 5 months)**

### **Project Description:**

Entrust Technologies is a global leader in solutions that bring trust to e-business. The company is committed to securing e-business transactions and communications over wireless networks, intranets, extranets and the Internet. Their products and services offer strategic, trusted e-business solutions and

real customer value for the Business-to-Business (B2B) Business-to-Consumer (B2C) and Enterprise Internet markets. Entrust solutions offer customers reduced costs, enhanced productivity, the ability to build closer relationships with larger trading communities and faster time-to-market. Entrust Technologies makes it safe to do business over the Internet.

## Tasks Performed:

- Adhered to strict software development life cycle timelines on all projects described below using ClearCase and MS Visual Source Safe source control, and PVCS environment.
- Architected, designed and developed Entrust/DesktopDesigner(TM), a new, innovative software installation customization tool for desktop administration and deployment. Entrust/DesktopDesigner (TM) allows the system Administrator to select which components of Entrust/Entelligence and other desktop solutions they would like installed on the user desktop, offering the flexibility of centralized control over the desktop footprint, user interface and branding.
- “Invented” Administrator Selections which can be pre-configured and included as part of a silent end user setup. Created certain features in Entrust/DesktopDesigner(TM) which were successfully filed and were being considered for a patent application with a U.S. Patent and Trademark Office.
- Developed technical specifications for various Entrust software including their initial design, implementation and deployment.
- Architected and developed Entrust/UpToDate(TM) application used to automatically update Entrust-Ready applications with minimum user interaction as soon as a new version of the software is available.
- Responsible for providing presentation-type training to technical support group about methods of deployment of PKI solutions in the enterprise environment with main focus on Entrust/DesktopDesigner, Entrust/UpToDate and Microsoft Service Management System (SMS).
- Responsible for providing innovative software deployment solutions for a wide range of Entrust products and product bundles.
- Created sophisticated, multi-platform installation systems using industry leading WISE Installation System, InstallShield, DemoShield, Borland Delphi and Microsoft Visual Studio (Visual Studio C++6.0). CD-ROM mastering and publishing using Borland Delphi 4.0 and Adaptec Easy CD Creator (shipped Entrust Enterprise Desktop Suite 4.0, EEDS 4.1, EEDS 4.2 CD, EDS 5.0 CD and EDS 5.0.1 CD).
- Responsible for providing software deployment solutions for a wide range of Entrust products and product bundles. Created sophisticated, multi-platform installation systems using industry leading WISE Installation System, InstallShield, DemoShield, Borland's Delphi and Microsoft Visual Studio.
- CD-ROM mastering and publishing using Borland Delphi 4.0 and Adaptec Easy CD Creator (shipped Entrust Enterprise Desktop Suite 4.0, EEDS 4.1, EEDS 4.2 CD, EDS 5.0 CD and EDS 5.0.1 CD).
- Project leader in a group of 6 people, assisting in current development tasks, managing everyday progress of current projects and reporting to senior product managers. During the process

of expansion trained new team members, leading them through new projects, providing guidance with difficult topics and providing programming tips and tricks.

- Resident expert on some of the tools used such as: WISE Installation System, Delphi, C++ Builder, Visual Basic.
- Created easy-to-use software wizards and implemented a powerful installation package virtually requiring no user interaction, complete with an advanced un-installation module and setup customization tool. Created a product CD-ROM browser using DELPHI 4.0
- Desktop Applications Deployment Team Member, Entrust/Entelligence 4.0, 5.0 & 6.0 Team Member, Entrust/Express 4.0, 5.0 & 6.0 Team Member, Entrust Desktop Solutions 6.0 Team Member, Entrust Desktop Solutions 5.0 Team Member, Entrust Enterprise Desktop Suite 4.0 Team Member
- Managing project source code, documentation and bug reports using MS Visual Source Safe and ClearCase.

## **Project # 12**

### **Pronexus Incorporated**

#### **Systems Analyst / Programmer**

**September 1995 – January 1998 (2 years, 5 months)**

## **Project # 12.1**

### **Systems Analyst / Programmer**

**September 1995 – January 1998 (2 years, 5 months)**

### **Project Description:**

Pronexus is a well established company specializing in computer telephony applications, focused on world class application generator development tools and speech-enabled computer telephony solutions. Pronexus Incorporated believes in a full exploration of the potential of its employees to achieve the absolutely the best results and productivity at the same time ensuring full satisfaction from the work well done. While at Pronexus, Mr. Michalowski had been responsible for many tasks that had reflected his solid experience in those areas. Being a consultant who enjoys challenge he had filled the following positions while still meeting and exceeding his company's requirement.

### **Tasks Performed:**

- Designed and developed software written for VBVoice, a WINDOWS 95/NT based Telephony toolkit, in a MS Visual Source Safe development environment.
- This product was rated the finest Windows based telephony product by BYTE magazine. Application development implementing Computer Telephony Integration (CTI).
- Programmed, tested and debugged advanced Windows telephony tools for Visual Basic using MS Visual C++. Managed project source code, documentation and bug reports using MS Visual Source Safe.
- Provided the technical support team with problem solutions, including creating sample

applications for Voice and Fax support (Visual Basic - all versions, MS Access, MS SQL). Stress-testing of telephony hardware and newly created telephony tools in environments such as Windows95, NT3.51, NT4.0 and Windows3.X.

- Designed and created OO ActiveX controls using MFC in MS VisualC++ (Windows system API programming)
- Designed custom telephony applications using VISUAL BASIC (utilizing MS Access and SQL db).
- Developed multi-language support for language control module.
- Created of all VISUAL BASIC examples currently being shipped
- Excellent experience with database apps (SQL, FoxPro, ODBC in VB, MS Access)
- Experience creating ActiveX controls using VB5
- Excellent experience with Borland's Delphi and C++ Builder
- Worked on a DELPHI support of our product

## **Project # 12.2**

### **Pronexus Incorporated**

#### **Internet & Software Support Specialist**

**September 1995 – January 1998 (2 years, 5 months)**

#### **Tasks Performed:**

- Providing Internet access, including desktop Internet mail with SMTP dialup connection, setting up and maintaining Remote Access Service and Fax server for the firm. Fully in charge of the corporate web page design and publishing using MS Front Page97 & MS BackOffice (<http://www.pronexus.com/>). CD-ROM mastering and publishing using Borland Delphi 2.0 and Corel CD Creator (currently shipped CD). Windows help files authoring.
- Creating sophisticated, multi-platform installation systems for telephony applications and toolkits including TAPI installations with TTS (text-to-speech) and ASR (advanced speech recognition) support (WISE Installation System, InstallShield, DemoShield). Supervision of NT Server based network, including network maintenance, voice mail implementation and network expansion.
- Designed and created a TechWiz, a web based, CGI driven, technical support inquiries facility for automated processing of the customers problems. This new innovation has helped to automatically update our Oracle database and improved our Technical Support service making a lot of customers very happy.
- Created a product CD-ROM browser (autorun) using DELPHI 2.0

## **Project # 13**

### **Winshots Technologies**

#### **V.P. Software Development and Marketing**

**June 1996 – January 2004 (7 years, 8 months)**

**Project Description:**

Winshots Technologies is an independent software vendor, born as computer consulting company in the early 1996, located in the heart of Canada's Capital, Ottawa. Originally known as Arkosoft Technologies, the company has adopted a new name to better reflect the type of business it is in. Winshots' main focus is software development for all Microsoft(R) Windows(R) platforms. Winshots develops applications for everyday desktop use, developer tools and toolkits, system utilities as well as custom server components, solutions and applications.

**Tasks Performed:**

- Design and development of most Winshots software solutions. Software development group management, project scheduling, forecasting. Responsible for all Winshots marketing decisions and future products plans as well as all other corporate issues affecting Winshots as a whole.
- Web development solutions for 3rd party projects, including web page design (HTML, ASP, XML, CSS) solution design and integration using VB6, COM+, ASP, .NET, web site monitoring and database design including MS SQL Server, Oracle 9i, MySQL, MS Access. More important/recent clients include: Arkosoft Technologies and Bestlane Incorporated.
- Author of the following Winshots products: Award winning System Snapshot, EZWebMonitor, FileZip, EditIni, KeelOS, Calendar Browser, StopWatch and System Viewer.

**Project # 14**

**Innovative Communications, (Kingston) Ltd.**

**Software Programmer**

**June 1994 – August 1995 (1 year, 3 months)**

**Tasks Performed:**

- Application development implementing a design of Training Development System using Visual Basic, MS Access and MS SQL. Design and implementation of database management system. Web design and publishing of the Training Master Home Page, using HoTMetaL Pro, Macromedia Dreamweaver, Adobe Photoshop and Paint Shop Pro.
- Training System development analysis using field research and cost efficiency planning. Graphical user interface design for easy to use, professional look of the Training Master. Application testing (QA/PV) and debugging.

**Project # 15**

**Smart Solutions Software**

**Systems Programmer / Analyst**

**June 1993 – June 1994 (1 year, 1 month)**

## **Tasks Performed:**

- Small business system design using Visual Basic, Borland C++ for Windows, FOXPRO (2.6 for DOS) database management system. GUI and controls design. Field research combined with system analysis and planning. System efficiency estimation and planning.

### **Project # 16**

**APREL Laboratories, Inc.**

**Electronic Laboratory Assistant**

**November 1990 – June 1993 (2 years, 8 months)**

## **Tasks Performed:**

- Lab diagnostics of electronic instruments, measurements, data calculation and reporting. Customer service, lab equipment maintenance, data processing, software and hardware installation. Assisting with the building of Shielded Rooms used for controlled environment testing. High voltage testing of telecommunication devices such as phones, cell phones, headsets, handsets, etc.

## **EDUCATION**

ICS Canada (2008)

Fitness and Sport Nutrition Diploma

University of Zurich. (2001)

Bachelor of Science in Computer Science degree

Lemmex & Associates Ltd. (2000)

Workplace Dynamics Certificate

Career Development Institute (CDI) (1995)

Programmer/Analyst Diploma

Carleton University (1993 – 1994)

Faculty of Computer Science