

# Mr. Gustavo Miller

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613-600-2661 Ottawa 819-246-7521 Gatineau

IT Related Experience Senior experience in the IT (Design and develop)

**Certification(s)** Computer Sciences – Diploma (Peru) 1985

Querying Data with Transact-SQL – (M20761)

Advance ASP.NET Core 3.1 Razor Pages – Udemy (2021) Bootstrap 4.0 / CSS Courses – On-line Certificates (2021)

LinkedIn Academy – JavaScripts/jQuery (2021) Udemy - SQL Server Administration Part 1 (11/2022)

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Incorporation OntarioTeck VBA Developers

Updated On 15 Nov 2022

### **PROFILE**

Mr. Gustavo Miller is a Computer Programmer and Database Modeler with extensive experience in designing and developing business solutions / Databases.

- Designed and coded new Windows applications, as well as Office Solutions in different Microsoft Office Suites.
- Reversed engineer, document and migrate legacy applications.
- Desktop applications mainly in Visual Basic and C# using different .NET framework versions, web-based applications using C#, ASP.NET Razor Pages (Model-View-Controller), Microsoft Identity (Authentication). Open-source Rapid Development Framework in CakePHP (MVC). HTML, Bootstrap 4, CSS (Bootstrap), JavaScript/JScript, Json/XML files
- Modeled and designed databases using Microsoft Access, SQL Server (SSMS) and MySQL (Oracle). Tables, relationships, triggers and T-SQL scripts. Generate Data Definition Language (DDL) to create, alter, or drop data structures.
- Produced business and technical specifications, database models, UML diagrams, use cases and other pertinent documentation.
- Worked as a team member or alone, on-site or remotely.

# PROFESSIONAL EXPERIENCE

# Project # 1

# New Connections Ministries - NCM

Systems Analyst / Web Developer / Database Modeler Board of Directors member

September 2022 – Current

<u>March 2017 – December 2017</u> (Part-time) Revamp application .Net #4.5. Introduce SQL Server Back engine <u>September 2012 – March 2013</u> – Initial develop -HTML static site

NCM website was originally designed as static pages written in HTML. Later on, application was upgraded to ASP.NET with no database back-engine.

NCM Application was recently revamped to ASP.NET Core Razor pages in C# using bootstrap 4.0 as CSS platform. Back engine designed in SQL Server with ASP.NET Core Microsoft Identity modules. Access SQL Server database using Repository and Unit of Work pattern, in a multi-layer architecture project.

2022 - We are implementing new sections and services to the New Connections Ministries website. The admin tool will be developed using Microsoft Access and SQL Server since only 1 or 2 people will be using it.

### Tasks Performed:

- Design SQL Database; SQL User (Login/User permissions), tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Design application using. NET Core Razor pages Model View Controller (MVC) pattern.
   Implement multiple project layers (Core, Data and Entity Layers).
- Entity Framework Core Migration Database first. Implement ASP.Net Core Identity for Authentication and Authorization.
- Implement Entity Framework migrations (Database First approach). Update further changes via migrations. Use multiple DbContext.
- Implement Repository and Unit of Work Pattern.
- Review with Board members the new implementations required. User registration and membership.
- Migrate the application from IONOS webhosting to our own hosting server.
- Install and configure IIS. Create application pools, redirection and permissions. Register AAA records with domain hosting.
- Install Microsoft SQL Server 2019; migrate NCM database model and implement new features.
- Build Management application to allow admin users to maintain website contents. Interface implemented using Microsoft Access.
- Original website was designed as static HTML pages. NOTE: This is no longer active.
- Manage Site: version control DevOps, publish new changes, maintain database (backup database)

#### Environment:

ASP.NET Core 3.1 Framework, ASP.NET SDK 7, ASP.NET SDK 6, ASP.Net core Razor C#, Microsoft Entity Framework Core Libraries, Bootstrap 4.0. CSS, HTML, JavaScripts, Mode-View-Controller Architecture, Repository and Unit of Work Pattern, SQL Server Management (SSMS), Data Tables jQuery Plug-in, SweetAlert Client-Sise Library, Azure DevOps Source Control, Transact-SQL Language, Microsoft Office 2013/2016, Microsoft Office 365, Microsoft Teams, Microsoft Visual Studio 2017/2019, Windows Server 2016, Internet Information Services 10 (IIS), Microsoft Windows 10, Microsoft Visual Basic for

Applications (VBA), Microsoft Visual Basic References, Microsoft Windows Extensibility 5.2 (VBIDE), Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, Microsoft Forms 2.0, ActiveX Controls.

## Project # 2

# Share Services Canada (SSC)

Systems Analyst / Senior Developer / Database Modeler March 2021 – September 2022

Join their Network and Security Services – Business Intake Management and Service Delivery Coordination group to redesign and improve their Business Request Costing process: BR Costing. Original process was developed in Excel manually gathering information from different SDM (Service Data Management).

Moved to a separate department (same department) to review their existing Networking Tracking Sheets

Network Tracking Sheet Spreadsheets converted into a Local Database using Microsoft Access aiming to move into Microsoft SQL Server. The database went from Microsoft Access → Microsoft SharePoint / Microsoft SQL Server to Oracle MySQL Server. I am currently coding in PHP -using CakePHP 4.0, migrating database from SQL Server to MySQL Naming and conventions, and merging to existing SDI system.

Migrated Tracking Sheet Spreadsheets into new web-based application developed in PHP (CakePHP Framework). Back-engine in MySQL Oracle – located in Microsoft Clouds. Version Control handled via DevOps.

### Tasks Performed:

- Meet with client daily to review existing requirements scrum meetings.
- Build database models for BR Costing and Networking Trackers, review weak areas and areas that require enhancement. Using Microsoft Access 365 as proof-of-concept.
- Retrieve data programmatically from JIRA Enterprise database. Update local database Access / SQL Server.
- Upsize from Microsoft Access to Microsoft SQL Server 2012-2016; redesign database model to fit new requirements
- Normalize SQL Database; tables, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Migrate Microsoft Access to Microsoft SharePoint use as SharePoint Lists.
- Migrate Microsoft SQL Server to Oracle MySQL. Change fields/tables naming conventions to fit into CakePHP Model View Controller (MVC) environment.
- Develop BR Costing in Microsoft Access Visual Basic for application. Integration to Excel and Microsoft SharePoint.
- Currently migrating Excel Network Tracking Sheets (VBA) into new SDI Web-Application PHP platform developed using CakePHP framework.
- Produce High/Low-level documentation; UML diagrams, Use Cases and flowcharts.

### Environment:

PHP Web Development, C# Language, CakePHP 4.0 Framework using MVC (Model-View-Controller), Azure DevOps Source Control, Microsoft SharePoint Lists, Transact-SQL Language, Microsoft Office 2013/2016 (including Access), Atlassian Jira Software, Microsoft Visual Studio Code, Microsoft Visual Studio 2017/2019, Microsoft Visual Basic 6.0 (VBA), Microsoft Visual Studio Code, Microsoft Visual Studio

Windows 10, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Windows Extensibility 5.2 (VBIDE), Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, Microsoft Forms 2.0, ActiveX Controls (Treeview, Listview).

# Project # 3

# Department of National Defense (DND)

Systems Analyst / Senior Developer / Database Administrator February 2017 – February 2021

March 2022 – September 2022 (Part-time Contract)

Join their COS/VCDS Administration department to redesign their existing Business Planning database. Their tool was developed initially in Microsoft Access using native Jet Engine and VBA (Visual Basic for Applications). This tool is used by their different organizations -within VCDS, to control and track their funds allocations for their corresponding Tasks/Activities and Sub-activities.

The database was upgraded to SQL Server 2012 in 2019. Front end application was kept in Microsoft Access, but 90% of their Business Rules were implemented at Server-side using Stored Procedures, Functions and Triggers, to do most of the work and relieve Client-side interface. Implement new ActiveX controls and maximize Office Automation features (Excel/Word/PowerPoint/Outlook).

2020 Requirements: Customer requires changes in the interfaces; make it more flexible. Implement the use of the standard Ribbon object; introduce the use of XML for configuration purposes. Client requires embedded help using HTML/JavaScript and Web controls.

### Tasks Performed:

- Meet with client to review existing model; review weak areas and areas that require
- Upsize from Microsoft Access to Microsoft SQL Server 2012-2016; redesign database model to fit new requirements. SQL Database used as back engine for both web interface and Access Application.
- Normalize SQL Database; tables, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Web interface developed in ASP.NET Core Razor pages in C#. Implement Mode View Controller (MVC), Bootstrap #3 (CSS), HTML 5.
- Separate tables and code; use connection string to retrieve data.
- Implement Ribbons and XML scripts; implement dynamic call-backs to manage options selected and availability/visibility of commands
- Design and implement local web page to be used as help in the system.
- Revamp VCDS Interface (still Microsoft) and connect to SQL Server using DNS-less connection strings.
- Implement XML scripts. Ribbon UI, Constants and defaults. Create XML files locally on application folder. Used to edit XML: Microsoft Expressions Web, and Visual Studio 2017.
- Design/develop Excel/Word macro templates for reporting and for data-entry mode. Connect to SQL Server DNS-Less via macros. Exchange information between Office Applications and SQL Server.

### Environment:

Microsoft SQL Server 2008r2, Microsoft SQL Server 2016, Microsoft SQL Server 2012, SQL Server Migration Assistant (SSMA), SQL Server Management (SSMS), Azure DevOps Source Control, Transact-SQL Language, Microsoft Office 2013/2016 (including

Access), and Office 365, Microsoft Visual Studio 2017/2019, Microsoft Visio 2019, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Windows Extensibility 5.2 (VBIDE), Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, Microsoft Forms 2.0, ActiveX Controls (Treeview, Listview).

## Project # 4

# **Transport Canada – Aviation Security** (Ottawa – Ontario)

Systems Analyst / Senior Developer

Multiple contracts history

December 2016 to January 2017

April 2016 to July 2016

October 2015 to December 2015

December 2009 to February 2010

September 2007 to March 2009

Continue developing the Airport Security Risk Management Tool. Please refer to the <u>2016</u> and <u>2015</u> Projects for further information.

### Tasks Performed:

- Implement mechanism to update the Aerodromes Workbook without having to extract their
  existing data –classified information. This was accomplished by using the VBIDE in order to
  access and modify the Visual Basic for Applications VBA project.
- Fix small bugs and implement new features to the several existing Wizards.
- Implement French reports in Microsoft Word.
- Enhance and separate Custom XML Parts. Implement forms (MS Forms 2.0) to maintain information.
- Redesign CustomUI interface (Excel Ribbon); Implement menu controls. Implement Ribbon callbacks in VBA.
- Office Automation: Exchange information from Excel into Word and PowerPoint. Implement macro-enabled templates with digital signatures (security purposes).
- Extensive XML design; share structured information. Use XML Schemas to format information to be viewed using internet browser.
- Implement Memory-dataset for sorting and filtering information.
- Implement mechanism to update code in existing XLAM AddIN and XLSM main workbooks without disrupting client's sensitive information. This is accomplished by using Microsoft VBA Extensibility 5.3 reference to the VBIDE Project, which allows us to replace the code at Runtime.

### Environment:

Microsoft Office 2007, Microsoft Visual Basic 6.0 (VBA), Microsoft SQL Server 2008 R2, SSMS, Transact-SQL Language (Stored Procedures and Functions), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Windows Extensibility 5.2 (VBIDE), Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, Microsoft Forms 2.0, ActiveX Controls.

# Project # 5

# International Development Research Center (IDRC) (Ottawa – Ontario)

Systems Analyst / Senior Developer September 2016 to November 2016

Developing the Grant Administration Workbook developed to control Grants given to third World Countries. Manage Budgets, Expenses, Payments and disbursements of money. Generate a Macro-less

version of their Budget registry and subsequent Financial Reports workbook. Application was developed using Visual Basic for Applications (VBA).

### Tasks Performed:

- Implement new procedures to produce Client Budget workbook template. Using VBA Macros.
- Implement new import budget procedure which will read Client information into Financial Workbook Master.
- Implement new Export/Import processes to handle subsequent Financial Reports base on their grant reporting cycles. Process automated using Visual Basic for Applications VBA Macros
- Implement In-Memory Database Tables using ADODB.
- Implement XML to store System information.
- Implement new Ribbon definition.

#### **Environment:**

Microsoft Office 2013, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, Microsoft Forms 2.0, ActiveX Controls.

# Project # 6

**Transport Canada – Aviation Security** (Ottawa – Ontario)

Systems Analyst / Senior Developer April 2016 to July 2016 October 2015 to December 2015 December 2009 to February 2010

September 2007 to March 2009

Continue developing the Airport Security Risk Management Tool. Implemented new requirements and fix bugs. Please refer to the 2015 Project for further information.

#### Tasks Performed:

- Implement new enhancements and changes based on the experience gained in Ottawa aerodrome.
- Upgrade Access database to SQL Server. Migrate tables and relationships. Implement LOG files into separate storage.
- Normalize SQL Database: tables, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Implement new features needed. The application was tagged as classified with data.
- Implement reports in Microsoft Word -report created programmatically using Microsoft Office 14 Object Libraries and Visual Basic for Applications VBA Scripts (code).
- Add new Risk Management wizards in order to gather security information.
- Add data encryption module.

### Environment:

Microsoft Office 2007, Microsoft Visual Basic 6.0 (VBA), Microsoft SQL Server 2008 R2, SQL Server Management (SSMS), Transact-SQL Language (Stored Procedures and Functions), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Windows Extensibility 5.2 (VBIDE), Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, Microsoft Forms 2.0, ActiveX Controls.

### Project # 7

# Foreign Affairs, Trade and Development Canada (DFATD) (Ottawa – Ontario)

Systems Analyst / Senior Developer January 2016 to March 2016

Join their team to develop and enhance the already existing Fiduciary Risk Management Tool (FRET) to meet new requirements in the area of Recipient Organization and Project risk information. The FRET has been developed in Excel 2003 by their Financial Management to collect detailed evaluation-criteria-based risk information on all Gs&Cs funding Recipient Organizations and Projects. Export data into Microsoft Access database to produce complex financial reports.

### Tasks Performed:

- Met with client review initial requirements and new enhancements.
- Review and evaluate existing method -identify strengths, deficiencies and areas of improvement.
- Implementation of new RTM sections (sheets).
- Introduce the use of XML type information rather than excel Listobject tables.

#### **Environment:**

Microsoft Office 2010, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, XML Binding.

# Project #8

**Transport Canada – Aviation Security** (Ottawa – Ontario)

Systems Analyst / Senior Developer October 2015 to December 2015 December 2009 to February 2010 September 2007 to March 2009

Joined Transport Canada Aviation Security Operations team to develop the Airport Security Risk Management Tool. Application was developed in Microsoft Office 2013 (Excel/Word/Access) using Office. This tool was specifically designed to handle classified information and to be used by both Government and Aviation Industry partners. A total of 12 Aerodromes across the country were to use this application.

Application developed using Visual Basic for Applications VBA. Application makes use of: API references, such as: ActiveX Data Objects, Scripting Runtime, XML v60 and Google Translate API, OpenXML Format CustomXML parts to store data, CustomUI Ribbon object.

- Met with client review initial requirements.
- Review and evaluate existing method -identify strengths, deficiencies and areas of improvement.
- Application to be developed of several office suites -Microsoft Office 2007, 2010 and 2013, using Windows Userforms and references.
- Design Microsoft Office CustomUI interfaces for Excel Ribbon.
- Create XML tables to be stored in CustomXML Parts.
- Create and design database model in Access Database 2013.
- Normalize Database: create Tables and Indexes, data referential integrity and data constraints. NOTE: data exported into XML format using OpenXML CustomXML components.

- Create methods to manipulate and maintain CustomXML Parts; confidential data to be encrypted.
- Implement Google Translate API to allow user to quickly convert strings from Worksheets.

Microsoft Office 2007, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), XML Document Object Model (DOM), Open XML Format, XML Binding.

# Project #9

**Abbott Point of Care** (Kanata – Ontario)

Systems Analyst / Senior Developer April 2015 to September 2015 March 2014 - June 2014

Join their team for the second time in the past year to helps the in two projects; WaferTrak and AssemblyTrak Systems.

Work on new reports for the WaferTrak System – The Wafer Yield Report is intended to be used for monitoring daily production activities and yield for the Wafer Fabrication unit at Abbott Point of Care. Report will extract information from the TrakSuite databases in order to provide the user a summary of requested information. The system is intended to read information and will not write data to the TrakSuite databases; as such the information from this report will be dependent upon the data entered into these databases through the applicable TrakSuite application. This report will be accessible in a centralized location (MS SQL Reporting Services) as well as in Microsoft Access.

Work on new Rotations and Defect module – The AssemblyTrak is used to manage the cartridge assembly operations such as cartridge build planning, configuration management, inventory management, detailed component serialization and traceability. The defect data window in AssemblyTrak enables the operators to enter sensor and final inspection defect information and summarize the data into reject categories on a rotational basis.

### Tasks Performed:

- Reverse Engineer their existing WaferTrak Yield report in order to redesign new report.
- Met with client to gather information to create new functional, technical and user requirements specifications.
- Regular meeting to review progress report.
- Create and maintain simple and complex SQL stored procedures –including XML queries. Information to be processed and populate build Yield Report matrix related information.
- Upload reports to SQL Reporting Services Server (SSRS).
- Review existing AssemblyTrak Rotations and Defects module.
- Design and code new Rotations and Defect form.
- Create new and maintain complex SQL Stored Procedures with Server-Side code, Alter tables, indexes and data constraints using T-SQL.
- Generate Data Definition Language (DDL) T-SQL scripts to create, alter, or drop data structures in an instance of SQL Server.

Environment:

.NET Framework, ADO.NET, Microsoft Office 2007, Microsoft SQL Server 2005, Microsoft SQL Server 2008 R2, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic Console application, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Visual SourceSafe VSS 6.0, Visual Studio On Line, Windows API's and Components (VBA), XML Document Object Model (DOM), VSFlexGrid Pro (Components Source)

## Project # 10

# Risk Sciences International (Ottawa – Ontario)

Systems Analyst / Senior Developer August 2014 to March 2015

(Part-Time - Remote Contract)

Revamp the **Pathogen Modeling Program** developed originally in Visual Studio .NET 2003. This software was designed as a research and instructional tool for estimating the effects of multiple variables on the growth, survival and inactivation of food borne pathogens. The models are based on extensive experimental data of microbial behavior in liquid microbiological media and food. The objective of predictive food microbiology is to mathematically describe the growth or decline of food borne microbes under specific environmental conditions. With this ability to describe comes the capability to predict.

There is no business or technical documentation on this application. My task is to reverse engineer the application and migrate to Visual Studio 2012 and 2013; during this exercise we will eliminate any old techniques; replace RTF and CSV files for XML documents that would be easier to update. Due to tight deadlines System Documentation; Business Analysis, Technical and User requirements will be done as we progress in the revamping.

### Tasks Performed:

- Evaluate existing application and identify existing deficiencies. Identify any new requirements. Define critical activities that require revision and analysis.
- Reverse engineer existing application developed in VB4.
- Met with client to gather information to create new functional, technical and user requirements specifications.
- Create business requirements (add roles and needs).
- Extract and decode information from binary files into Microsoft Excel Workbooks using VBA.
- Build XML data dictionary. Load information using LINQ-to-XML.
- Visual Studio Team Services / Advance Installer extension.

#### Environment:

Visual Studio Team Services, .NET Framework, LINQ-to-XML, Microsoft Visual Studio 2012, Microsoft Visual Studio 2013, Microsoft Visual Studio 2003, Microsoft Windows XP, Microsoft Windows 7, Microsoft Windows 8, Microsoft Visio 2010, Data Visualization Charting, ActiveX Controls (Microsoft Chart and Flexgrid).

# Project # 11

**Abbott Point of Care** (Ottawa – Ontario)

Systems Analyst / Senior Developer March 2014 - June 2014

**Assembly Track System** was designed to control the material used in the manufacturing of blood test devices. Application through their complex structure kept track of bill of materials, chip usage, material transfer between assemblies and much more. The application had a deficiency that often caused the production line to come to a halt. The new module was to allow the operator to register a fault in the

production line, hold the batch, and continue with production. Engineers would then fix the faulty batch and apply resolutions as required.

### Tasks Performed:

- Evaluated existing system and identify deficiencies and new requirements. Define critical activities that require revision and analysis.
- Met with client to gather information to create new functional, technical and user requirements specifications. Modify existing business requirements (add and review existing roles and needs).
- Modified and added new requirements revisions to existing documents.
- Designed, coded and implemented changes to existing solution.
- Reviewed existing data model, designed and implemented new tables (identify relationships and redundancy, primary and foreign keys). Create and maintain stored procedures and update/insert triggers, scalar/table valued functions.
- Database backup scripts, register automatic backup scripts on Task Scheduler.
- Created implementation SQL scripts for production database environment.
- Extensive documentation from Functional Requirements, System requirement, User requirements, Database Model Object and Code Review.
- Designed and maintained simple and complex SQL Statements, dynamic SQL Statements, embedded and static SQL Statements.
- Tested procedures: Unit testing, installation testing, compatibility testing and implementation and deployment.
- Built Stored Procedure, Scalar and UD Functions library from database level.
- Created a stored procedures library using VBA Script; extracted SQL statement.
- Built VBA Script for searching code.

### Environment:

.NET Framework, ADO.NET, Microsoft Office 2007, Microsoft SQL Server 2005, Microsoft SQL Server 2008 R2, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic Console application, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Visual SourceSafe VSS 6.0, Team Foundation Services, Windows API's and Components (VBA), XML Document Object Model (DOM), Microsoft Visio 2007, Microsoft Scripting Reference, Microsoft WshNetwork Object.

### Project # 12

House of Common (Ottawa – Ontario)

Systems Analyst / Senior Developer Secret Clearance Level II October 2013 - February 2014

Join their IT department to maintain existing internal Windows and Web ASP.Net applications developed in various Microsoft Visual Studio suites. Windows applications (VB/C#) developed to maintain and control contents of their website portals. Data stored in multiple SQL servers depending on the department owner of the application. House of Common Website portal design to provide parliamentarian history information to the public; it contained a large historical database from Prime ministers, parliamentary governors and information, political parties' information and much more.

- Met on a weekly basis with Directorate Manager to review queue of pending's; schedule
  deployments and actions. Review existing requirements and problems, gather information for
  further analysis with team mates.
- Reviewed/prepare existing/new documentation; reverse-engineer undocumented methods and modules. Prepared business requirements (review roles and needs), functional, technical and user requirements. Design application (including UML use cases).
- SQL Server: Designed and maintained database model Schemas, (primary / foreign keys /relationships), T-SQL scripts (stored procedures, scalar functions) and data constraints.
- Designed, coded and implemented new ASP.NET solutions (LINQ-to-SQL, LINQ-to-XML), unit test and release beta version for testing.
- Unit testing, installation testing, and implementation and deployment.
- VBA Scripts, created a stored-procedures, extracted SQL statement, code searching, retrieve ASP.NET forms collection.

.NET Framework, ADO.NET, Microsoft ASP.NET, Cascading Style Sheets (CSS), DevExpress, HTML, Infragistics., LINQ, Microsoft Internet Information Services (IIS), Microsoft SQL Server 2005, Microsoft SQL Server 2008 R2, Microsoft Visual Studio 2008, Microsoft Visual Studio , Microsoft Windows 7, Microsoft SQL Server Management Studio (SSMS), Microsoft SQL Server SSIS, Transact-SQL Language (Stored Procedures and UDF), Microsoft Team Foundation Server 2010, Microsoft Visual SourceSafe 2005, XML Document Object Model (DOM), Microsoft Scripting Reference, Wscript.Shell, Wscript.Network, Microsoft Visio 2010.

# Project # 13

# Financial Management Institute (FMI) (Ottawa – Ontario)

Senior Developer - Remote Maintenance Contract

July 2013 - September 2013

July 2012 to August 2012

July 2010 to October 2010

Perform regular yearly remote maintenance and implement new enhancements to the **PSMW and PD Week** events. Implement new reports and add new module to access their existing Simply Accounting invoices and send them automatically to their clients using the Outlook feature. Add new streams descriptions to events.

# Tasks Performed:

- Met with management to implement new features, streams and reports required.
- Modify existing business requirements (add roles and needs), add new functional, technical and user requirements to existing analysis.
- Designed and implemented new module designed to access simply accounting information to submit invoices to registrants.
- Designed, coded and implemented changes according to new requirements.
- Testing; Unit, installation and compatibility testing. Implementation and deployment.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Built SQL script to run daily SQL database backup, register into Task Scheduler.
- SQL Server: Maintain/design T-SQL Stored procedures, triggers and scalar functions.

#### Environment

.NET Framework, ADO.NET, Entity Framework (EF), LINQ, Microsoft Access 2010, Microsoft Office 2007, Microsoft Office 2010, Microsoft SQL Server 2008 R2, Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Studio 2008, Microsoft

Visual Studio 2010, Microsoft Windows 7, Microsoft Visual SourceSafe 2005, Microsoft Visual Studio 2010 Tool for Office (VSTO), XML Document Object Model (DOM).

# Project # 14

# Canadian Medical Protective Association (CMPA) (Ottawa – Ontario)

Systems Analyst / Senior Developer August 2012 - June 2013

The *CMPA Macros* application was designed to generate Medical and Legal documentation using a number of automated templates. These templates had been created over the years by their different departments, and application would make use of Winscribe to create dictations which were then loaded by the typists. Final reports were produced in Microsoft Word, Microsoft Access and Microsoft Outlook 2010. Application database back engine was Oracle 11g and Word interface was implemented using Visual Basic for applications (VBA).

With the release of Windows 7 and Office 2010, application became unstable and needed to be upgraded. API function was required to be updated to new x64 OS. Application worked with an Oracle database, where Legal information has been compiled for at least 10 years.

### Tasks Performed:

- Met with client, reviewed existing functionality in Microsoft Office 2003; scripts developed in VBA.
- Reviewed business requirements (add roles and needs). Produced new business, technical and functional requirements documentation.
- Reversed engineer existing application; produced cross-functional diagram.
- Designed, coded and implemented new modules and changes according to requirements.
   Using Visual Basic for application (VBA).
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- SQL Server: Designed, debug and maintained simple and complex T-SQL, embedded SQL Statements. Connect SQL Server with Oracle using "MSDAORA" OLE DB drivers.
- Testing; Unit testing, installation testing, compatibility testing.

#### Environment:

Apache TortoiseSVN, Microsoft Office 2003, Microsoft Office 2010, Microsoft Windows 7, Oracle 11g, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), Winscribe Digital Dictation, XML Document Object Model (DOM), Microsoft Visio, Microsoft Scripting Reference, OLE DB drivers.

### Project # 15

*Nordion Inc.* (Kanata – Ontario)

Senior Developer June 2012 to July 2012

Join their busy IT department to migrate multiple databases from different versions of Access to Microsoft Office 2010 – most of these databases using Visual Basic for Application (VBA). These databases have been designed and used by their Research Engineers to compile information for their research.

Each database was analyzed extracting information from all objects found; including forms, queries, tables (local and linked) and macros. Using this information, we would create a document with the content of the original database that needed to be migrated. Migration process included the update of Windows API components and references for the different requirements. Export VBA code into text files to be loaded into version control.

### Tasks Performed:

- Met with IT managers and reviewed databases to be migrated.
- Meetings with database owners to review new database layout and functionality.
- Reviewed external database; Oracle and SQL Server 2008 R2.
- Separated native Access tables (back engine) from code database (VBA), normalize and optimize databases. Extract from each database all objects including forms, tables, queries, reports and code objects.
- Migrate multiple databases from Access to SQL Server 2008 R2
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- VBA Script to backup databases; use HTA application to control locations.
- Testing; unit, functionality and installation testing. Database compatibility testing.
- Designed, coded and implemented database utility in Microsoft Access 2010 VBA to extract database objects.

#### Environment:

Microsoft Access 97, Microsoft Access 2000, Microsoft Access 2003, Microsoft Access 2007, Microsoft Access 2010, Microsoft Access workgroup user-level security, Microsoft Office 2010, Microsoft SQL Server 2008 R2, Transact-SQL Language (Stored Procedures and UDF), Microsoft Windows 7, Microsoft Windows XP, Oracle 11g, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Visual SourceSafe 2005, Windows API's and Components (VBA), Microsoft Graph , Microsoft Scripting Reference, Wscript.Shell.

# Project # 16

# Financial Management Institute (FMI) (Ottawa – Ontario)

Senior Developer – Remote Maintenance Contract July 2012 to August 2012 July 2010 to October 2010

Performed maintenance and implemented new enhancements to the PSMW and PD Week events. New module designed to receive real-time notification of new registrants; user would be able to reply as registrations are received, this module was added to the Outlook interface. Add new streams descriptions to events, change streams configurations.

- Met with managers and reviewed new Outlook feature to be implemented.
- Modify existing business model (add roles and needs), technical, user and functional requirements.
- Designed, coded and implemented new modules and changes according to requirements.
- SQL Server: Maintain database model; existing/new tables, fields, relationships required. Built SQL script to run daily SQL database backup, create T-SQL to create new entities in production database.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.

- Testing; Unit, installation and compatibility testing. Implementation procedures and deployment.
- VBScripts: Backup files and network deployment.

.NET Framework, ADO.NET, Entity Framework (EF), LINQ, Microsoft Access 2010, Microsoft Office 2007, Microsoft Office 2010, Microsoft SQL Server 2008 R2, Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Studio 2008, Microsoft Visual Studio 2010, Microsoft Windows 7, Microsoft Visual SourceSafe VSS 6.0, Microsoft Visual Studio 2010 Tool for Office (VSTO), XML Document Object Model (DOM).

# Project #17

# **Public Service of Canada** (Ottawa – Ontario)

Systems Analyst / Senior Developer Secret Clearance - Enhanced March 2012 to April 2012

Join the Aboriginal Policy IT team to implement new enhancements into Aboriginal Documentation ADP Project Microsoft Access 2010 database; developed in Visual Basic for Applications (VBA). Designed to store legal caucus aboriginal information and allow management produce follow-up reports and case profiles. Information included Community List, Notes to File, RDIMS, Provision, Obligations, FSC's and Contacts.

### Tasks Performed:

- Met with client and reviewed existing system requirements, identified deficiencies and limitations (define critical activities that require study).
- Reviewed with IT department the business requirements (review roles and needs), functional, technical and user requirements.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement Stored procedures, triggers and scalar/tables UDF.
- Designed, coded and implemented new Windows Forms with code behind using Visual Basic for Applications (VBA).
- Generated VBScript to backup source databases before making changes.
- Testing: Unit and functional testing. Implementation procedures and deployment.

#### Environment

Microsoft Access 2010, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft Windows XP, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visio 2010, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), Windows Management Instrumentation (WMI), Data Access Objects – DAO, Microsoft Scripting Reference, Wscript.Shell.

### Project # 18

# Immigrations and Refugee Board of Canada (Ottawa – Ontario)

Systems Analyst / Senior Developer Clearance Secret Level II February 2010 to August 2011

Join their IT to maintain and convert two legacy software applications developed in Clipper 5.0 around 1990. The applications were the STAR and ATS. STAR (System for Tracking Appeals and Refugees) is one of the IRB's front line operational systems. It provides case tracking functionality for the IRB's Refugee Protection Branch (RPD) and Immigration Appeals Branch (IAD). ATS Adjudication Tracking System designed to register and manage Refugee detention information; hearing dates, settlements by judicial

procedure and judgments. It also included historical date's information; court dates, hearings and others.

It also included some maintenance utilities such as the Database Sanitizing, an overnight process that ensured the integrity of Clipper databases (Foxpro type databases), data migration and other MSDOS overnight procedures.

### Tasks Performed:

- Met with client to review existing STAR and ATS system specifications, study and comprehend functionality. Participated in regular staff meetings to discuss and review STAR / ATS status.
- Met with users and managers on regular basis to review business definition (review roles and needs), functional and technical requirements, database model and user requirements.
- SQL Server: Database model; tables, fields, relationships and data constraints required. Create stored procedures and triggers, scalar/table valued functions.
- SQL Server: Transfer data using SQL Server Data Tools (SSDT). Created SQL Scripts to migrate Clipper tables into SQL database, including database schema and data.
- Designed, coded and implemented new requirements and implementations to system. Implementation procedures and deployment.
- Built data dictionary for both applications. This included DBF, CDX and NTX.
- Create and maintain information in Visual SourceSafe and Team Foundation Server.
- Extract application users, groups and permissions from IRB active directory; populate tables.
- Build in utilities in Microsoft Office using Visual Basic for Applications (VBA) to update servers and workstations, programmatically access Active Directory.
- VBScript to extract and search information from legacy text code.

#### Environment:

.NET Framework, ADO.NET, Blinker compiler, CA-Clipper 7.0, LINQ, Directory Services (Active Directory), Microsoft Office 2007, Microsoft SQL Server 2008 R2, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Visual Studio 2008, Microsoft Windows 7, Microsoft Windows XP, MSDOS 5.0, RMake Object Builder, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Team Foundation Server 2010, Microsoft Visual Basic Console application, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Team Foundation Server 2010, Microsoft Visual SourceSafe 2005, Windows API's and Components (VBA), Windows Management Instrumentation (WMI), XML Document Object Model (DOM), Microsoft Visio, Microsoft Scripting Reference, Microsoft WshNetwork Object.

## Project # 19

# Financial Management Institute (FMI) (Ottawa – Ontario)

Systems Analyst / Project Manager Senior Developer – Remote Maintenance Contract July 2010 to October 2010

Revamp their Microsoft Access Application designed to maintain and handle registrations for yearly financial events; PSMW and PD Week, to .NET Windows Application. Application distributed among Office applications such as Excel, Work and Outlook. Word would maintain online registrations, confirmation and reports including Tags and Labels. Excel would handle financial registration information and Outlook would allow manager to contact new registrants as they complete registration.

### Tasks Performed:

Met with managers to review the new Office GUI interface.

- Design application using Office Automation in Microsoft Office 2007. Products used: Excel,
   Word and Outlook. Language: Visual Basic .NET Visual Studio Tools for Office.
- Evaluate existing system, identify deficiencies. Met with client and users to gather new requirements; business rules (roles and needs), functional (UML use cases), technical and user requirements.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/table valued functions.
- Testing; Unit, installation and compatibility testing. Implementation procedures and deployment.
- Use ADO.NET for direct method of data access within the .NET Framework.
- Built SQL script to run daily SQL database backup.
- Testing; Unit testing, installation testing, compatibility testing and implementation.

.NET Framework, ADO.NET, Entity Framework (EF), LINQ, Microsoft Office 2007, Microsoft Office 2010, Microsoft SQL Server 2008 R2, Microsoft Visual Studio 2008, Microsoft Visual Studio 2010, Microsoft Windows 7, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual SourceSafe VSS 6.0, Microsoft Visual Studio 2010 Tool for Office (VSTO), XML Document Object Model (DOM), Microsoft Visio, Microsoft Scripting Reference, Wscript.Shell.

# Project # 20

**Transport Canada – Air Cargo Security**(Ottawa – Ontario)

Systems Analyst / Senior Developer Secret Clearance Level II December 2009 to February 2010 September 2007 to March 2009

Contract Extension – Continue with application. Implement new changes to the <u>Security Test Bed.NET Windows Application</u>. Implement barcode reader new functionalities.

#### Tasks Performed:

- Review existing deficiencies and new functionality, technical requirements and changes required. Modify business (roles and needs), technical, user and functional requirements documentation.
- Design and coded TestBED front-end solution using Visual Basic .NET. Implement Rugged Handheld Computers barcode scanners with Windows CE 5.0.
- Design and coded Visual Studio for Application (VBA) AddIN to extract data from Access Database.
- Normalize MS Access Database; tables, fields, indexes, relationships and data constraints.
   Create queries (canned) and text queries
- Testing; Unit, functional and installation testing. Installation procedures and deployment.
- Generated VBScript to backup access databases before making changes.

#### **Environment:**

.NET Framework, ADO.NET, LINQ, Microsoft Access 2007, Microsoft Access workgroup user-level security, Microsoft Office 2007, Microsoft SQL Server 2005, Microsoft Visual Basic 6.0 (VBA), Microsoft Visual Studio 2008, Microsoft Windows 7, Microsoft Windows XP, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic Console application, Microsoft Visio 2007, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Visual SourceSafe 2005, Windows API's and Components (VBA), Windows Management Instrumentation (WMI), XML Document Object Model (DOM), Microsoft Scripting Reference, Wscript.Shell.

## Project # 21

# **PHAC** – **Public Health Agency of Canada** (Ottawa – Ontario)

Systems Analyst / Senior Developer Secret Clearance October 2009 to November 2009

Contract word templates (8) were designed to aid PHAC client to fill in their contract's documents, with the help of VBA macros the document offer options based on their choices selected. The original templates were designed in Microsoft Office 2003 Word and Visual Basic for Applications (VBA); update to Microsoft Office 2007. New set of templates, during this process we implemented some enhancements to their functionality and reliability.

#### Tasks Performed:

- Met with client to review existing templates and their functionality, identified deficiencies and limitations. Define critical activities to be analyze and re-designed.
- Met with client and modify existing business, technical, user and functionality requirements documents and models.
- Design new interface, code changes in Visual Basic for Application (VBA) and implement.
- Testing; unit, functionality and installation testing. Database compatibility testing.
- Generated VBScript to backup source documents before making changes.

#### Environment

Microsoft Office 2003, Microsoft Office 2007, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows 7, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), Microsoft Scripting Reference, Microsoft WshNetwork Object.

## Project # 22

### **SNC-Lavalin O&M Inc** (Ottawa – Ontario)

Systems Analyst / Senior Developer April 2009 to November 2009

Department of Management and Operational Information Transactions developed the Environmental Transaction Deliverables application as a means to organize the information that is required to be submitted to PWGSC by the AFD Contractor in the form of electronic records. The electronic records will be processed and validated, as specified, through an internal support application. The information that is processed will be used to provide management reports to interested PWGSC parties. The application gathered information for the following transactions: *Financial Planning, Commercial Letting, Environmental Activities, Utility Consumption and Electrical Demand, Critical Incidents and Inventories*; each of them with multiple questionnaires.

Originally the Environmental Transaction Deliverables information was controlled and kept in Microsoft Office 2007 - Excel using Visual Basic for Application (VBA). Application was upgraded to Microsoft Office AddIN using current .NET technology and SQL Database.

- Met with client to review and modify existing documentation and requirements, identified
  deficiencies and limitations. Build business definition (define roles and needs), functional,
  technical and user requirements.
- Design data entry interface, procedures and functionality for each of the transactions.

- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Testing; Unit testing, functionality and installation testing. Installation procedures and deployment.
- Built SQL script to run daily SQL database backup.

.NET Framework, ADO.NET, LINQ, Microsoft Office 2007, Microsoft SQL Server 2008 R2, Microsoft Visual Studio 2008, Microsoft Windows 7, Microsoft Windows XP, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Visual SourceSafe VSS 6.0, Microsoft Visual Studio 2010 Tool for Office (VSTO), Windows API's and Components (VBA), Windows Management Instrumentation (WMI), XML Document Object Model (DOM), Microsoft Scripting Reference, Microsoft WshNetwork Object.

# Project # 23

Transport Canada – Air Cargo Security (Ottawa – Ontario)

Systems Analyst / Developer September 2007 to March 2009

At Transport Canada I had the opportunity to work with different directorates; *Air Cargo Security, Rail and Urban Transit Security and Strategic & Business Directorate,* in one of my longest contracts.

**Security Test Bed.NET** a Windows application designed for Air Cargo Security group to compile security and screening information from specific test beds location throughout Canada. The test beds are responsible for scanning and screening parcels that come into the country and report any alarms and threats. The type of equipment used in the screening of these parcels varied from X-Ray machines to complex scanning devices and even dogs. Operators would register activity as the parcels were processed, then information would be exported into Excel Workbooks to headquarters for compilation and querying.

**Human Management Allocation and Cost** a Microsoft Office AddIN solution designed for Rail and Urban Transit Security group to store employees and projects information. The application kept track of the efforts used on each project, including financial and manpower. The information was used to help Directors to forecast overall cost on their directorate projects. Manpower time was calculated based on Human Resources.

**Program and Stakeholder's and Operation Framework Database** a Microsoft Office application designed for the Strategic & Business Directorate group to control the Stakeholders Information as well as the costs for the programs. Information was stored on Microsoft Access and upgraded to SQL Server 2005. Reports to be produced in Excel and word, sent automatically via email. Use Active Directory Domain Services to access and populate existing users to the initial table.

- Met with client from different directorates to review systems requirements.
- Build business specifications (define roles and needs), functional, technical and user requirements.
- Update Microsoft Access database to SQL Server.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.

- Designed, coded and implemented new requirements and implementations to system.
- Testing; Unit testing, installation testing, testing SQL scripts. Installation procedures and implementation.
- Access server active directory using VB.Net to populate users; roles, departments and security level.

.NET Framework, ADO.NET, LINQ, Microsoft Access 2007, Microsoft Access workgroup user-level security, Microsoft Office 2007, Microsoft SQL Server 2005, Microsoft Visual Basic 6.0 (VBA), Microsoft Visual Studio 2008, Microsoft Windows 7, Microsoft Windows XP, Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic Console application, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Microsoft Visual SourceSafe VSS 6.0, Windows API's and Components (VBA), Windows Management Instrumentation (WMI), XML Document Object Model (DOM), Microsoft Visio, Microsoft Scripting Reference, Wscript.Shell.

# Project # 24

**Innovapost** (Kanata – Ontario)

Senior Systems Analyst June 2007 to August 2007

Review existing legacy software developed in CA-Clipper 7.1 in early in 1990's. Application was designed to control the mail flow in their sorting location. Evaluate the newly selected relational database Advantage Database Server to convert existing application from Clipper tables to client/server architecture. Client has chosen this venue as the conversion process is much easier than converting to SQL Server because ADS supports the navigational architecture in the original table application was designed for.

### Tasks Performed:

- Met with client to review existing application functionality.
- Analyzed CA-Clipper file system database; table definitions and indexes.
- Created Database model base on existing file tables using SQL Server 2005.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Produced Evaluation results documents including conversion process, coding changes efforts, business rules and technical requirements (ADS Installation client and server).
- ADS testing; database testing, client installation, server installation, data migration and database monitoring.
- Testing; unit testing, compatibility test, installation and deployment.

#### Environment

Advantage Database Server, Blinker compiler, CA-Clipper 7.0, Microsoft Office 2003, Microsoft SQL Server 2000, Microsoft Visual Basic 4.0, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows XP, MSDOS 5.0, Microsoft SQL Server Management Studio (SSMS), Microsoft Visio, Transact-SQL Language (Stored Procedures and UDF).

### Project # 25

**Health Canada** (Ottawa – Ontario)

Systems Analyst / Developer September 2004 to April 2007

Participated in the development of two systems; Dental Services Application and the Children's Oral Health Initiative. Both systems developed for eHealth Solutions Department using Microsoft Access 2003 using Visual Basic for Application (VBA).

The *Dental Services Application* was to design to record dental procedures performed by registered and government-controlled dentists. It was designed to shift the emphasis from a primarily treatment and procedures-based approach to a more balanced prevention and treatment focus. Activities would include: Dental screenings, referrals for complex treatment, assistance to improve oral hygiene, dental sealants, fluoride treatments among many other treatments and procedures.

The *Children's Oral Health Initiative* application was designed to control services on the Dental Services Daily Record, to help managers identify procedure codes used for COHI services such as Dental Therapist, Dental Hygienist, COHI Aide, and other trained COHI providers.

### Tasks Performed:

- Met with clients to modify application existing business definition (define roles and needs).
   Determine and established functional, technical and user requirements.
- Reverse engineer existing application; produce technical diagram and modules pictogram.
- Re-design database model; tables, indexes and relationships. Primary and Foreign keys. Review fields redundancy and normalization. Implement SQL statements into access queries.
- Designed, coded and implemented new requirements and implementations to system.
   Language used: Visual Basic for Application (VBA)
- Separate databases into Application Database and Data Backend (linked tables). Migrate database into SQL Server 2005; create tables, relationships, stored procedures and triggers.
- Normalize SQL Database; tables, fields, indexes, relationships and data constraints. Implement stored procedures, scalar/tables UDF.
- Implement Microsoft workgroup Database security using Access MDW file; created groups and permissions (users and objects). Validate users' permissions with active directory.
- Designed new Windows interface in Microsoft Forms to handle data entry and reports.

#### Environment

Microsoft Access 2003, Microsoft Access 2007, Microsoft Access workgroup user-level security, Microsoft Office 2003, Microsoft Office 2007, Microsoft SQL Server 2005, Microsoft Visual Basic 6.0 (VBA), Microsoft Windows XP, Directory Services (Active Directory), Microsoft SQL Server Management Studio (SSMS), Transact-SQL Language (Stored Procedures and UDF), Microsoft Visual Basic Console application, Microsoft Visual Basic for Applications (VBA), Microsoft Visual Basic References, Windows API's and Components (VBA), Windows Management Instrumentation (WMI), Data Access Objects – DAO, Microsoft Scripting Reference, Wscript.Shell.

### TECHNICAL SUMMARY

Languages	
Visual Basic 3.0 Professional Edition	SQL Server 2003 / SQL 2005 Express
Visual Basic 6.0	SQL Server 2008 R2
Visual Basic 2005 / 2008 / 2010	Visual Basic for Application - VBA 6.0
Visual Studio 2005 / 2008	VB Scripting
ADO.NET Programming - VB / C#	Office Automation (Forms in Office Excel, Word
	Outlook and Access)
VBScripts, JScripts	VSTO Office Automation 2007/2010
LINQ languages; LINQ, LINQ-to-Object, LINQ-to SQL,	XAML Windows Phone 7
ASP.Net VB, HTML	
Clipper 5.x / Blinker 2.5 /5.1 / RMake	Dbase III / IV
PowerShell (OntarioTECK server)	
Copy backup files.	

Export installed application into text file. Created list of Hard drives.	
Create list of shared folders.	
Databases	Tools/Environments
Microsoft Access 97 through 2010	Visual Studio 2005 / 2008 / 2010
Microsoft SQL Server / Client	Crystal Reports VS 2008 / 2005
	Visual Studio Team Foundation Server 2010
	Visual SourceSafe 2006
Support	<u>Techniques</u>
Microsoft Windows 7 /95 / 2000 / NT / XP	Object Oriented Analysis and Design
Microsoft Office Suite 2000/2003/2007/2010	Structured Analysis and Design
Microsoft Office Automation	Database Modelling
Microsoft VSTO (Visual Studio Tools for Office)	Entity Framework / Object Models
Tablet Computers (Laptops)	Networking - Workgroup
Handheld Computers	Remote Desktop Connection
Websites	
Developed in Visual Studio 2008 and 2010 Web	www.taxireservas.pe (web application)
Applications ASP.NET, AJAX, VB Scripts and Java	www.miller-hs.com (HTML page)
Scripts.	www.kmdollarlight.com (HTML page/apps)
	<ul> <li>Windows Phone Application</li> </ul>
All these are products I have developed either for	Android Application (currently developing)
Canadian market or Peruvian market. These are	
projects I do on my own time.	