

## Michael Bowman

### CAREER SUMMARY

20+ years of *professional* full-stack software engineering & project management experience across a wide range of business domains and platforms for on-premise and cloud-based computing solutions on a global (geo-wide) basis. I believe in, and practice Agile/Scrum methods as well as employing design patterns & test-driven development methods during full stack development efforts. I have excellent communication, people, and technical skills. My resume, work history, and, references speak to my career successes and skills.

### HIGH LEVEL SKILLS & TECHNOLOGY SUMMARY

General Skills	Top Technical Skills for Today's World	
<ul style="list-style-type: none"> <li>• Abstraction Modeling</li> <li>• Analysis                             <ul style="list-style-type: none"> <li>○ Data</li> <li>○ Process</li> </ul> </li> <li>• Architecture</li> <li>• Build Engineering</li> <li>• Coding (full-stack)</li> <li>• Configuration Mgmt.</li> <li>• Data Modeling</li> <li>• Design</li> <li>• Environment Tuning</li> <li>• Networking</li> <li>• Project Management</li> <li>• Remote Engineering</li> <li>• SCRUM Master</li> <li>• Testing (TDD, UAT)</li> </ul>	<ul style="list-style-type: none"> <li>• Angular JS / Angular 2+</li> <li>• Atlassian Tools (Jira, Confluence, etc.)</li> <li>• AWS:                             <ul style="list-style-type: none"> <li>○ S3 / Lambda / Cloud formation, etc.</li> </ul> </li> <li>• Azure                             <ul style="list-style-type: none"> <li>○ Storage, Queues, Service Bus &amp; Functions</li> </ul> </li> <li>• Babble</li> <li>• Bootstrap</li> <li>• CSS / LESS / SASS</li> <li>• Databases (see note below)</li> <li>• Docker for Windows</li> <li>• Entity Framework</li> <li>• Kitematic</li> <li>• Foundation</li> <li>• Git                             <ul style="list-style-type: none"> <li>○ Bitbucket</li> <li>○ Git Hub / Desktop</li> </ul> </li> <li>• Go</li> <li>• Google Apps</li> <li>• Goto Meeting</li> <li>• JavaScript (ES5 / ES6 / ES7)</li> <li>• jQuery</li> </ul>	<ul style="list-style-type: none"> <li>• JSON</li> <li>• JWT, OAuth, Auth0</li> <li>• Kibana</li> <li>• LINQ / Lambda</li> <li>• Linters (JS Lint, ES Lint, TS Lint)</li> <li>• Material Design</li> <li>• Micro Services</li> <li>• .NET (C#, MVC, WEBAPI2)</li> <li>• NODE JS / NPM</li> <li>• Postman</li> <li>• REST</li> <li>• Riot JS</li> <li>• SaaS / IaaS / PaaS / IoT</li> <li>• SOAP</li> <li>• SPAs</li> <li>• Swagger</li> <li>• Type Script</li> <li>• Visual Studio / VSCODE</li> <li>• Vid Conf (WebEx, Goto Meeting, etc.)</li> <li>• Vue</li> <li>• Webpack</li> </ul>

**All Java Script frameworks I have used employ MVC, MVVM, or MVP design patterns.**

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*The list above does not reflect (cite) the vast number of DBs such as Oracle, SQL Server, Teradata, MongoDB, No SQL, Graph DBs, etc. See detailed work history for a comprehensive list.*

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## DETAILED TECHNICAL SKILLS SUMMARY

- AWS Cloud: S3, Cloud formation, Cloud front, Lambda, Docker
- Azure Cloud: Fabric, Docker (for Windows & Mac), Monitoring, Virtual Machines, Storage, Queues, Azure Functions, Web Jobs, Azure CLI 1.x and 2.x, Azure Portal.
- Microsoft Tools: Every version of Visual Studio, .NET, SQL Server, VSCode, Windows, Azure, Entity framework, Unity, MVC (all versions), Razor, C#, Web Services, WinForms, XAML, WPF, Expression Blend, Expression WEB, Application Blocks, Remoting, Reflection, Serialization, ADO.NET, Generics, (VB6, C++, InterDev), Visual Source Safe VSS, ActiveX, ADO, ADOMD, OLAP, COM/DCOM, Interfaces, IoC, MTS, ODBC, OLEDB, Visio, Office(Excel, Access, Word, Power Point, InfoPath), Project, Visual Modeler, Repository, ADSI, CDO, FSO, IIS, Exchange Server, VBA, VBScript, DHTML, Remote Scripting, Microsoft DOS, Hyper-V, BizTalk, Site Server, Commerce Server, SQL DTS, Groove, Vista, Live Meeting, VSTS, Share Point, TFS, WCF, Work Flow, AJAX, LINQ, TSQL, LAMBDA, and OData.
- File NET Tools: Image Services (IS), Content Services (DS), Visual Work FLOW (VW)
- Teradata Tools: Queryman, WinDDI
  - Databases: DBA (Oracle / MS SQL Server), Neo4J, MongoDB, Redis, NoSQL, Large scale OLAP/OLTP, Distributed database design, parallel processing, Complex data conversions (ETL), Tuning / optimization, Backup / restore plans
- Methodology/Mgmt: Analysis & design, UML modeling, Round trip engineering, Project management, Configuration management, Build engineering management, “virtual” engineering services
  - Apps: Thin client (WEB) design (n-tier) for cloud/non-cloud, Thick client design (n-tier), Component design (state & stateless), GUI design, Multi-user/ threaded design, Application servers (middleware)
- Applications: Text analysis, disability claims system, data warehousing/reporting, records management, developer productivity tools, stolen product/theft management systems, failure analysis (electro migration), work flow management, human resource management, budgeting & finance, image & document management solutions, call center/ticket tracking systems, E.T.L. & complex conversions, collaboration/message systems, Y2K compliance and renovations, configuration management, and custom niche apps.
  - Misc: Clustering / farms, troubleshooting, fault isolation, LANs / WANs, VPNs / tunnels, WEB, B2B, Cruise Control.NET AngularJS, WebStorm, Plunker, Bootstrap, GIT, Mercurial, Redmine, Mocha, Chai, Jasmine, Apex Grid, Desaware components, Sheridan components, IBM OS2, Far Point SPREAD, TELNET, FTP, HTTP, TCPIP, UDT, Sockets, XML, DOM, SAX, DTDs, XLST, XML Authority, Silverrun, REMEDY, SQL Navigator, Source Off Site, ERWin, BPWin, Symantec ACT, pcAnywhere, Borland Interbase, Jbuilder, Delphi, Subversion, Tortoise, Visual SVN, Putty, LEAD Imaging, CCTray, Mocks, TDD, JIRA, BAMBOO, BitBucket, NodeJS, Grunt, GIT, Confluence, Pivotal, AxoSoft. JetBrains Re-sharper Amazon Web Services, S3, EC2, Beanstalk, etc. Oracle Enterprise - 9.x, 8.x, 7.x (packages, stored procs, functions, triggers, DDL, DML DCL, ETL) Oracle Designer, Enterprise Manager, SQL Loader, Server Manager, Agents, NET 80, SQL NET, Forms, SQL Plus, PL/SQL, Grunt, Gulp, SASS/LESS, Web Storm, Angular JS, NGINX, NPM, Material Design, Foundation, UI-Bootstrap, Bootstrap

## **CAREER PROJECT EXPERIENCE**

### **Vertical Works (owner)**

**1/1996 – present**

**Flagship Career Achievements:** I completed **17 projects** at Intel Corp over 20 years. During that time, I added tremendous value to Intel (e.g. saved Intel \$50,000 per month by developing the FPO program). The FPO and Erra-light (electro-migration) projects are flagship accomplishments for Vertical Works. The FPO project produced the cleanest most up-to-date data store (record of source) for Intel and it was used daily by Intel resources globally. The projects ranged from COM / DCOM, web apps to server apps running in farms and super clusters. Erra-light was instrumental in the certification of the Pentium chips.

### **Veracity (Enterprise Architecture Group) – Target: Young Living of Utah**

**02/2018 – 03/2018**

As part of an EA team, I went onsite and participated in and documented the Large, Medium and Small (low-level) details of the Young Living Corporation from top to bottom in terms of people, roles, process, pain points, goals, and solution architecture. Following the one-week intense onsite discovery, I then spent two weeks crafting summary and detailed reports which outlined the observations with full traceability back to business & quality goals. The on-site interviews included the board of directors, department managers, project managers, dev-ops teams, ops teams, engineering teams, and contractors, as well as physical systems architecture, code break downs, work-flows, and, global concerns.

### **View Point software – (contract) architecture/development**

**11/2017 – 01/2018**

Developed architectural proposals for a multi-queue Azure based solution on a very compressed schedule. I then implemented the solution using Azure storage queues, Azure blobs, and Azure functions in C#, with JSON and custom APIs. This green field feature allows users (on-demand) to submit criteria for downloading huge projects (SQL BLOBS and related SQL data) into Zip files which are stored on Azure Blobs. I also helped other engineers in establishing the Full Stack on their development boxes. Technology used, .NET4.6.1, Azure CLI, Azure Storage, NODE, NPM, GULP, Angular, MVC, REST, SOAP, SQL Server, GIT, VSTS, VSCODE, VS.NET and various 3<sup>rd</sup> party tools.

### **INMAR Corp – Senior Software Engineer**

**4/2017 – 10/2017**

Full stack front end engineering on multiple apps (ES5, ES6) with Angular, Node, Riot.js, Jenkins, NPM, webpack, gulp, babble, .NET, SQL Server and many other 3<sup>rd</sup> party libraries (including bootstrap and custom CSS styles), CouchDB, REST APIs, Postman, Kibana, Swagger UI, auth0, JWT, VSO, GitHub, The Atlassian tools, VSO and Nexus. Contributed to legacy and greenfield projects on cross functional teams in a very fast paced environment on a remote basis. Client is on the East Coast, I am on the West Coast. As a senior engineer, I was responsible for working with vague requirements, and turning them into quality product; this includes technical analysis, design, coding, testing, building and deploying to the cloud.

### **Judicial Decision Impact Analysis & Reporting- R&D Vertical Works**

**10/2016 – Present**

Analysis, design and construction of a SaaS (cloud) app that tracks, and reports on marital divorce based information on a nationwide scale for the public to quickly ascertain and understand the dynamics of divorce from real time data as it relates to the decisions of judges in all venues (across America). This app also summarizes the financial impacts of judicial decisions on males and females; showing aggregate financial impacts on the parties per location. The app is authored in NodeJS with Angular (NG2) using Neo4j, MongoDB, and MySQL. This application also displays data visually via Google APIs and allows for dynamic queries.

### **Armstrong International – Full Stack Consultant**

**10/2016 – 12/2016**

Designed & coded a NodeJS / Angular (SPA) web site (mean stack). Node was used to serve up an Angular SPA, and to proxy REST calls from Angular, to Node, to a legacy Oracle/Maven/Spring system, and back to Angular. I configured Node to provide caching functions to lower bandwidth to the Legacy system. The Angular SPA I created performed isothermal and adiabatic type load calculations for three types of environments (economy, fixed and area); each with unique inputs. The Angular app also included toast messaging services. The Node portion used NPM, and GRUNT, with tasks for building less/sass, testing, and running the app from the command line (via NPM or GRUNT). Used Mocha / Chai for testing. Authored using Windows 10, VSCODE, Angular 1.5.9

#### **Zorts Sports – Full Stack Consultant**

**05/2016 – 09/2016**

Designed & coded a NodeJS web site (mean stack) that served up a custom Angular app which rendered binary tree data in “bow tie brackets” format for sports applications. The NodeJS backend used Express and Socket IO for high speed updates to the clients. This site used JSPLUMB to connect the binary tree nodes (angular directives) in a bow tie fashion. Each node (directive) had specialized behavior (popups, and CSS behavior). Authored using Ubuntu 14.x, VSCODE, Angular 1.5.8

#### **Oportun (Progress Financial) – Consultant**

**12/2015 – 05/2016**

Worked on a financial app called ngZeus (front end). Duties included writing AngularJS code in the context of resolving Jira tickets based on 2 week sprint cycles. Debugged other people’s code and provided feedback to mgmt. for methodology, discipline, process and tool improvements. Also helped migrate code from an older backbone app into AngularJS 1.5.x. The workstations were MACs running EI Captain with WebStorm, VSCode, Grunt, SASS, NPM, Bower, NGINX, MySQL, MongoDB, and several standard open source tools and libs. This was an open source project. The teams are mostly virtual; working remotely. This was an ES5 project with new development to be in ES6. Used Atlassian tools; Confluence, Jira, Bit Bucket, & Source Tree with AWS for cloud services. Also.

#### **Hoffman Academy – Consultant**

**8/2015 – 10/2015**

Using Web Storm, I created a MEAN stack Angular JS app with Sockets.IO, Routes, and REST APIs. I built VMWare images that run Ubuntu, the MEAN Stack, PHP, Web Storm, MySQL, GIT, MongoDB, Robo Mongo, Bower, Grunt, NPM & WordPress for easy development and onboarding of new developers. Within two weeks I put the company on the Atlassian tool set, taught Agile/SCRUM principles, mentored the team, created work flows, policies, architectures & designs for brownfield and greenfield efforts. I also created new keys and namespaces for all AWS environments. I also created customer service portals (for customer service employees) to manage issues. I overhauled the existing AWS platform bringing the client into a sandboxed, DEV, TEST and PROD deployment practice using Bamboo and Bit Bucket, because, the prior configuration was not using Bit Bucket pushes on a regular basis, and the live server and Bit Bucket were not in sync. I also administered the Atlassian tools and created four new Bit Bucket REPOS for brownfield and greenfield efforts to support continuous integration and automated builds.

#### **IMAN Studios - Software engineer server migration**

**5/2014 – 7/2014**

Identified weakness and developed recommendations for an existing social web app. Helped client to acquire Bizspark services, and plan to upgrade current development services from an adhoc open source environment to TFS with full SDLC using AGIL practices. Reviewed server logs and helped repair holes in the system. Improved the existing code base and SCC by making changes to the branches to reduce merger madness. Used Vs.2013, ASP.NET and SQL Server to unravel an undocumented website that had reached entropy. Produced documentation, and plans to move forward on the AZURE platform. Helped other developers.

**DW Associates LLC – Technology director / lead software engineer****11/2011 – 04/2014**

Besides scrum-based software development with .NET technologies, my responsibilities & duties included the establishment of best practices, crafting architecture & design for cloud & non-cloud based solutions, server maintenance, server configuration, build engineering, SharePoint configuration, network security and mentoring the development team. I was also responsible for creating and managing Team Foundation Server (with 12 build agents) and for deploying builds to DEV and PROD environments in Azure and Rackspace. I used .NET 4.x to build MVC3, MVC4 and WCF based apps that were scalable and robust. As SCRUM Master I managed projects and sprints (again TFS), and trained others on the team. I created learning videos (on YouTube) for team members to learn TFS, SharePoint and VPN access. As an analyst, I collaborated with many people (usually virtually with GoToMeeting and Skype) in order to document complex problems and craft best practice solutions in simple graphical form. I designed and built complex apps using TDD with .NET 4.x, MVC3 & MVC4 (Razor), Enterprise Services with COM+, SQL Server 2008 R2, Visual Studio 2010 and 2012, TFS 2010, and Merchant Services. I mentored other engineers with tools and technology and helped upper management with strategic tasks related to the product. This is a virtual team that used Goto Meeting extensively for collaboration. All work was done from my home-based lab in Portland Oregon.

**Sigma Digital Imaging - Consultant****12/2010 – 9/30/2011**

- Architecture, design, development and build engineering. Designed and engineered an “x-ray” acquisition & imaging system using WPF with .Net 3.5 & 4.0, LEAD Tools and various 3<sup>rd</sup> party x-ray sensor & scanning devices from Toshiba, Alara and others. Was responsible for full SDLC duties including analysis, design & build engineering. Used Cruise Control, SVN & MSBuild to establish automatic builds. Designed a fully normalized SQL SERVER DB with a related Entity Framework model to provide data access to the app. Used design patterns throughout the app. Used advanced WPF features to accommodate the graphics needs of the app; drag and drop, scaling, binding, resources. The app has intensive algorithms for image manipulation (post processing). Also created an FDA submission document. Also created Test Driven Development tests and used LINQ throughout the application layers. Was also responsible for analysis, documentation & project management tracking using Axosoft On-Time. Worked with vendors to resolve COM to .NET issues. Used PINVOKE and other advanced .NET features.

**Learning.com (Portland OR) - Consultant****9/2010 (30 day contract)**

- In less than 30 days I exceeded my contract deliverables & client expectations. I setup and configured multiple nested SharePoint sites to track project artifacts, personnel, status reports, discussions (wikis), risks and resources. I setup and configured a Jira / Green hopper (AGILE/SCRUM) project with full metric tracking of burn down and velocity. I built and delivered a very detailed “multi release, multi sprint” MS Project plan which described the SDLC in very fine detail. I then “charged” (loaded) the Jira project with one release having four sprints and filled up the task board using requirements as a source. I coordinated with other departments, developers and upper management in organizing development/test efforts, acquiring hardware for integration build and test, and I set tasks for developers. Ahead of schedule I built & delivered a comprehensive technical architecture document which set forth the technologies and over all architecture, direction and scope for the SOA system and its constituent parts (from vision to physical system). I also helped other developers with Database normalization tasks, and helped them grasp the big picture on SOA and MSMQ in the architecture. This was a very tight budget project. I was tapped to kick start this stalled & stale project and get it up and running.

**CCLI (Portland OR) - Consultant****6/2010 - 8/2010**

- This was a quick project to support a Microsoft CRM project that needed a backfill developer towards the end of the project. As .NET Team Lead for the CRM side, duties included general



problem solving, design, building and testing of Microsoft CRM customizations, plugins/workflows, system-to-system integration points and web services. Used VS 2010 with SQL 2008R2, Microsoft CRM 4.0, VMWARE, and TFS. Duties also included analysis, design, coding and testing (TDD) to support the client's needs. The project was managed with JIRA (AGILE) and daily SCRUM meetings. This was a very compressed project. Created a bridge DLL to facilitate moving data between the Order Entry system and CRM using VS2010, Dynamic Entities, LINQ for CRM(XRM), CRM Native Query Language, CRM.SDK and proxy objects for CRM service and metadata access.

**Intel, .NET Engineer/Consultant (Portland OR)**

**11/2009-5/2010**

- (1<sup>st</sup> proj) Contributed architectural, design and coding bits for a large complex windows forms application. Used 3<sup>rd</sup> party charts and controls (Ultra Grid) as well as SQL Server for back end tasks.
- (2<sup>nd</sup> proj) Fabricated detailed UML requirements via reverse process engineering. Constructed a core framework with Data Access and Business Object layers using ADO Entity Framework in an HTTP Context. Also modeled and created the 24-table database using 3NF standards with full engine side enabled RI and declarative constraints. Also created Test Cases (TDD) to cover testing of Business Objects and DAL. Reported status on a regular basis and helped other team members with other projects and technology issues as they arose. Used Team Foundation Server as the source code repository.

**Boeing, Lead Developer/Architect/Consultant (Seattle WA)**

**05/2007 – 08/2009**

- Full SDLC duties which included analysis, architecture, design, construction (coding), server configuration, migrations, build engineering and customer support for a worldwide N-Tier .NET web based application and SQL database that provided world-wide airlines and their pilots with electronic documents on the flight deck for normal and emergency flight situations. (FAA approved project). Responsible for the installation of Team Foundation Server & VSS. Worked on two other projects; ePlane and LogBook. EDB was a WinForm app running in the cockpit.
- Technologies Used: VSS, VSTS, SQL Server 2000 & 2005, .NET 1.1, .NET 2.0,.NET 3.5, VS.NET 2003, VS.NET 2005, VS.NET 2008, ADO.NET, ASP.NET, C#, XML, XSLT, DOM, XPATH, VBScript, JavaScript, Windows 2003 Server, HTML, Visio UML, NUnit, Web Services, Stored Procs, Generics, SharePoint, MS Build, Nant, SQL DTS, Master Pages, Controls, JQuery, Subversion, Tortoise, Putty Visual SVN, Net Beans, Java, Tall Components, dtSearch, IIS5 and 6.

**Random Lengths, Lead Developer/ Architect/Consultant (Eugene OR)**

**12/2005 – 03/2007**

- Responsibilities included architecture, design and construction of a large “n-tier” framework and solution which yielded a subscription-based web site that delivered custom “visually graphed” reports from real time data that constantly changed. Responsible for the design of three SQL Server 2005 Databases as well all layers of .NET application tiers (DAL, BOs, GUI (web app), Interfaces and Globals) as well as web services and NUnit test projects. The VS Solution contained 6 projects and the SQL Server Solution contained 3 projects; for a total of 9 projects with over 650 objects. Responsible for VSS DB setup, maintenance and trained developers in C# coding and proper VSS techniques.
- Technologies Used: VSS & SOS, SQL Server 2005, SQL, .NET 2.0, VS.NET 2005, ADO.NET, ASP.NET, C#, XML, XSLT, DOM, XPATH, VBScript, JavaScript, Windows 2003 Server, HTML, Visio UML, NUnit, Web Services, Stored Procs.

**Intel Corp., Senior Software Developer/Consultant (Portland OR)**

**08/2005 – 12/2005**

- Responsible for all aspects of web development which included client side page fabrication (GUI), client side scripting (JavaScript/DOM), web services, XML manipulation, and, validation. Contributed to bug fixing for a SOA system that used extensive web services. Used C# to craft web services for system to system data migrations.

- Technologies Used: VSS, SQL Server 2000, SQL, .NET, VS.NET, ADO.NET, ASP.NET, C#, XML, XSLT, DOM, XPATH, VBScript, JavaScript, Windows 2003 Server, HTML, Visio UML, NUnit.

**Server Logic, Senior Software Developer/Consultant (Portland OR) 04/2005 – 07/2005**

- Performed bug fixing, new development and architectural changes for 10+ production web sites and backend databases for large clientele. Performed VSS DB clean up and restructuring for better build engineering. Sites ranged from ASP.NET to old style ASP.
- Technologies Used: VSS, SQL Server 2000, .NET, VS.NET, ADO.NET, ASP.NET, ASP, C#, XML COM, DCOM, ADO, VBScript, JavaScript, ODBC, OLEDB, Windows 2000 Server, Windows 2003 Server, Terminal Services, HTML, Visio UML, COM+, ERWin, ADOBE.

**Intel Corp., Senior Software Developer/Consultant (Portland OR) 08/2004 – 04/2005**

- Responsible for the design and deployment of a new architecture (including SQL Server DB and downstream clients) that yielded a 60X performance increase in upload and download speed over the old architecture. Fixed defects and made retrofits to the code base in 4 applications.
- Technologies Used: VSS, SQL Server 2000, .NET, VS.NET, ADO.NET, C#, C++, XML COM, DCOM, ADO, VBScript, JavaScript, ODBC, OLEDB, Python, Windows 2000 Server, Terminal Services, HTML, Visio UML, COM+

**Sea Bright Insurance, Senior Software Developer/Architect/Consultant (Seattle WA) 02/2004 – 06/2004**

- Triton – Quote/Policy Management system project: Triton was an N-tier application written in C# (using .NET WinForms) with a SQL Server 2000 for the back end.
- Responsible for formulation of the n-tier architecture of the system as well as the design of the components in the front, middle and backend tiers. This included the design of stored procedures, .NET C# Business Objects, Data Sets, Data Access Layer objects and GUI components. Responsible for set up of proper “build engineering” procedures and for configuration of VSS to achieve robust build cycles. Mentored other developers in proper coding technique for C#.
- Technologies Used: VSS, ERWN, SQL Server, .NET, VS.NET, ADO.NET, C#, XML COM, DCOM, ADO, FSO, ODBC, OLEDB, Windows 2000 Server, Terminal Services, HTML, Visio UML, COM+

**Intel, Senior Software Developer/Consultant (Portland OR) 06/2003 – 12/2003**

- Global Event Management System (GEMS) project: GEMS was a centralized web based system that all Intel employees and contractors (world-wide) used to create service requests.
- As a Senior Software Developer was responsible for GEMS 1.1 development, Configuration Management, Conversion from ASP to ASP.NET, optimized SQL and Stored Procedures, debugged stored procedures and generated documentation.
- Technologies Used: VSS, ERWN, SQL Server, .NET, VS.NET, ASP.NET, ADO.NET, VB.NET, XML COM, DCOM, ADO, FSO, ODBC, OLEDB, ASP, VB SCRIPT, FTP, IIS5, Windows 2000 Server, Terminal Services, HTML, PVCS. Active Perl for .NET, REMEDY.

**Intel, Senior Software Developer/Consultant (Portland OR) 03/2003 – 06/2003**

- Worldwide Finished Processor Order Stolen Recovery System project: This system saved Intel millions of dollars every year by reducing the amount of worldwide RMA fraud that involves worldwide thefts of Intel product. The system pulled information from many sources including SQL Server and Teradata, with a final destination in Oracle that served up information to a worldwide Intel audience.
- As a Senior Software Developer was responsible for all phases of analysis, design, development, implementation, testing, deployment and documentation for full SDLC.

- Technologies Used: Oracle 9i, DTS, VB6, VSS, ERWN, Silverrun, ETL, Teradata, SQL Server, COM, DCOM, ADO, FSO, ODBC, OLEDB, VB SCRIPT, FTP, SQL Loader, PL/SQL, SQL Navigator, SQL Plus

**CNA Insurance, Senior Software Developer/Consultant (Chicago IL) 08/2002 – 02/2003**

- Disability Claims, Contract Management & Duration Advice project: Thick client N-Tiered application comprised of over 50 separate VB projects, 3,000 VB COM objects, 250 forms, hundreds of VB customized controls, and 400+ tables in Oracle 8. Deployed to 8 MTS Servers and 8 Citrix Servers in order to service hundreds of users across the country.
- As a Senior Software Developer was responsible for debugging and new development in the front, middle and backend tiers. Generated technical design documentation and code for new development.
- Technologies Used: Oracle 8, MTS, VB6, Far Point, VSS, PVCS, ERWN, DB Artisan, COM, DCOM, ADO, FSO, ODBC, OLEDB, VB SCRIPT,OLE/DB

**Intel, Senior Software Developer/Consultant (Portland OR) 06/2002 – 08/2002**

- As a Senior Software Developer was responsible for R&D using version 1 of the Microsoft Operations Manager. Duties included product evaluation and integration analysis for the CQIS team at Intel.
- Technologies Used: SQL Server 2000, MOM, Microsoft Office 2000

**Intel, Senior Software Developer/Consultant (Portland OR) 03/2002 – 06/2002**

- As a Senior Software Developer, was part of a team that was responsible for the design and implementation of large XSD/XML transformations and documents with source data derived from Oracle 8i for the APAC / Vantive Depot Worldwide Interface and numerous data conversions. Solely responsible for DBCS to ASCII conversions as well as numerous complex ETL conversions. Designed and implemented conversion logic for Oracle databases as it related to worldwide customer data.
- Technologies Used: Oracle 8i, SQL NET, NET 8, SQL Loader, SQL Plus, .NET(EA), Erwin, Visual Source Safe, ADO/OLEDB, Visual Basic 6, & DOM, XSLT, XPATH, XML, SOM.

**North Pacific/CGU/One Beacon/Liberty Mutual, Lead Developer/Consultant 10/2000 – 10/2001 (Portland OR)**

Project: Integra Work Management (Nation Wide Intranet Insurance Application)

- As Lead Developer provided technical assistance to the rest of the development staff (employee & contractor- 25+ total), and interviewed candidates to ensure the client hired quality people. During the re-engineering efforts -related to the vendor supplied components, worked closely with upper management (CEOs, Presidents & VPs) along with middle management, project managers and vendor engineers. Traveled to the east coast to help deploy the application as needed. Charged with PVCS management tasks as required.
- Designed and implemented major Backend enhancements to four SQL Server databases across five environments (20 databases in total) for a nation-wide intranet application. This included data normalization, table design, the design and creation of triggers and stored procedures and security analysis. Migrated from SQL Server 6.5 to SQL Server 7, as well as performed day-to-day DBA tasks. Responsible for Server configuration – this included WEB, APP and Database Servers- all in a WEB Farm.
- Responsible for the analysis, design and the coding of the Middleware MTS compliant VB6 middleware components for the WEB based system. Responsible for the retrofit/conversion of 50+ components to a compliant MTS transaction state. Identified and solved major design, scalability and performance issues that threatened the roll out of the system. Identified and solved the problems associated with the general design of the system as well as vendor supplied Imaging and



Workflow components that failed to handle the workload in our N-tier & web environments. The custom solutions engineered stabilized the system and boosted performance- allowing us to roll out on time. Responsible for pushing “the code base” from one environment to another- this included WEB pages, MTS components and MTS packages, and, SQL Server data and structures.

- Technologies Used: SQL Server 6.5, SQL Server 7, Oracle 8, PVCS, ERWIN, Oracle Enterprise Products, Visual Source Safe, FILE NET VISUAL WORKFLO, FILENET IMAGE SERVICES, MTS, COM+, IIS4, IIS5, NT4, Win2K Server, ADO/OLEDB, Visual Basic 6, Interdev, ASP, JavaScript, VBScript, IE5, Remote Scripting & DOM, as well as FileNET Panagon components.

**Kaiser, Software Engineer/Analyst/Consultant (Portland OR)**

**04/2000 – 06/2000**

- Project: Financial System (Client Server): Responsible for the analysis and design of a relational database that would track the financial and supportive information required to support an online budgeting system for government contracts in the medical research sector, as well as the front end GUI logic and design. Worked with CHR analysts, managers and users to uncover the data streams, processes, interfaces and requirements for the proposed system in multiple regions of the enterprise.
- Technologies Used: Rational Rose, MTS, SQL Server 7, VB6, Excel, Visual Source Safe, ADO/OLEDB and terminal server for Windows 2000, Windows 2000.

**Automatic Data Processing (ADP), Software Engineer/Consultant (Portland OR)**

**01/2000 – 04/2000**

- Project: Jupiter MAP (Client Server/Web): Responsible for making major design contributions as well as several VB deliverable contributions to a Visual Basic/WEB/ N-Tier project that was under a compressed development schedule. Created designs which enabled the development team to effectively develop the package in a team-oriented environment with minimal integration impact.
- Technologies Used: VB6, ADO/OLEDB, MTS, SQL Server 7 and Clear Case, as well as Sheridan Active X Controls.

**Intel Corp., Software Engineer/Analyst/Consultant (Portland OR)**

**10/1998 – 01/2000**

- Project – EMSYS (Client Server / Web): Designed and built an Active X Server Reporting Center (Com Component) that serves up reports to authorized users. This component provided users with a WIZARD like GUI to minimize user error and to promote easy maintenance. The component was DCOM capable (remote activation ready) and, also downloadable via the intranet. Built an OCX control that performs dynamic filtering on complex data - the control could be used by any COM client- such as Excel, Word or IE. The OCX was primarily used in the reports served up by the report center. Generated test scripts to test the report wizards, and modified the DB in terms of creating triggers / SPs, modified tables, and wrote DML/DDL scripts to support the new reports.
- Project – ERRALITE (Client Server / Web): As the only developer on the team, was responsible for creating a complex failure analysis Report analysis CLIENT/SERVER system that replaced an older VAX /SAS system. Duties included reverse engineering parts of the existing VAX, full blown analysis, design, specification generation, data modeling, data base design, database implementation, front end design, front end implementation, data migration, data conversion, deployment and project management. Screened potential candidates for high tech positions at Intel, as well as to teach individuals with regard to optimal ADO usage. The back end of ERRALITE was SQL Server 6.5 and the front end was VB6. Developed a customizable, automatic data loader that loaded data three times a day from a legacy system into the ERRALITE SQL Server database. Created a WEB integration system that displayed the information from SQL Server on the INTEL Intranet.
- Technologies Used: VB6, ADO/OLEDB, MTS, SQL Server 7, FTP, BCP, and Visual Source Safe, as well as Sheridan Active X Controls.

**Comsys, Lead Developer/Consultant (Portland OR)****11/1996 – 10/1998**

- Project: Y2K, HR, staff augmentation. Duties covered a large scope including analysis, design, data modeling, programming and system enhancement. During the last 6 months was involved with complex Y2K testing and software renovations for COMSYS clientele in the Portland area. Y2K duties included the management of Y2K testing and renovations for 7 client/server systems, as well as the analysis, strategic planning and implementation of Y2K renovations for client/server systems. Helped build three internal applications for COMSYS using Visual Basic, Delphi, Access SQL/Server and Interbase5. Involved in a think tank that formulated Y2K strategies for client/server systems and legacy systems in the Colorado Springs division of COMSYS.
- Technologies Used: VB6, ADO/OLEDB, MTS, SQL Server 7, FTP, BCP, and Visual Source Safe, as well as Sheridan Active X Controls, Oracle, SQL NET, SQL Plus, Delphi, Interbase, Lotus Notes.

**Smith Norris Corp, Product Development Lead (Pleasanton CA)****03/1996 – 10/1996**

- As the Product Development Lead, was responsible for managing developers, priorities and tasks of the development department in accordance with industry standard techniques. This included establishing version control, introducing proper coding standards, executing structured code reviews, maintaining existing code, developing deployment strategies for various production environments, setting budgets, traveling throughout the Pacific Northwest to meet with clients concerning issues, product improvements, and for gathering requirements for future solutions.
- Technologies Used: ODBC, VB3, VB4, Diamond Head Imaging, Oracle(all tools), Erwin, Visio, Exchange, SQL Server, VBX, OCX, SQL NET, Crystal Reports

**Symantec Corp. Senior Technical Analyst/Programmer (Eugene OR)****11/1994 – 03/1996**

- As a Senior Technical Engineer at Symantec, was responsible for providing and delivering world class technical support to external MIS departments- as well as to individuals, with regard to Symantec products- network and standalone. Last project- at Symantec was to build an internal Visual Basic 4.0(client/server) pilot project called ROVER ASSISTANT. In addition, provided support to other Visual Basic developers, and Symantec technicians, with regard to OLE automation programming techniques and common sense Visual Basic programming techniques as they both related to the pcANYWHERE product line. Responsible for generating quality technical information and- from time to time, training other technicians and employees with regards to products, theory and support strategies.
- Technologies Used: VB3, ODBC, Oracle, SQL Server, Novell, NT, Crystal Reports, Win32s

**EDUCATION**

- **Attended Chaffey College 1984 – 1985**
- **I continue to study “daily” as technology changes every minute. Current focus, Angular 2+, Open Source, WebPack, Node JS, RIOT JS, VUE, REST, Cloud for IoT, Quantum Computing (Qubits), physics (QFT), BlockChain, and AI.**