

## Career Summary

I am an accomplished full stack software architect / developer / IT manager / technical lead with 35+ years of industry experience. My primary focus has been on the Microsoft stack. My real-world experience covers most all of Microsoft's current and past technologies complimented with many other frameworks, databases, hosting providers and programming languages. You can view a sample Angular 11 application by navigating to [SoftwareGladiator.com](http://SoftwareGladiator.com) and a sample React application at [Weapass.com](http://Weapass.com). I have years of experience delivering many shrink-wrap products to over a million customers. I've architected, developed, lead and managed software teams to deliver accounting solutions to thousands of businesses. A large part of my career has been dedicated working to protect America in various roles supporting the DoD, DoE at LANL, counterterrorism, law enforcement and more defense contractors than I can remember. My work experience also includes 6+ years in the petroleum industry and many years in the telecommunication industry. If all that was not enough reason to hire my services, please read on!

### Professional Skillset Matrix

Visual Studio 32 years	C# 22 years	Angular 6 years	JavaScript 22 years	WPF 10 years	Architect 32 years
RxJS 6 years	JQuery 7 years	Bootstrap 10 years	WCF 10 years	WEB Service 10 years	React 1 year
TypeScript 6 years	Entity Framework 13 years	Azure 2 years	AWS 3 years	Sockets 10 years	RESTful Services 7 years
Xamarin 1 year	SQL Server 25 years	Oracle 20 years	Dynamo DB 1 year	IT Manager 6 year	Team Lead 10 year
Work Flow 3 years	OO Design 32 years	UML 32 years	Jira 8 years	C / C++ 15 years	JAVA 4 years

I am an Independent IT Contractor and have been incorporated since 1998' as KISS Software Corporation, employed by 1 company for over 25 years with a long list of premier clients. Each client has been a separate use-case and learning experience which allowed me to be educated by the best engineers in America. What I look for in a project is to work with current technologies and to build on my skillset. All my roles have included a huge amount of hands-on software development. I only work on corp. to corp. terms because of the long hours that are constantly demanded and for the tax benefits.

In the year 2000 I developed an e-Commerce website and order processing solution to learn .Net and C#. My prior 20 years of C++, Java and C industry programming experience made the evolution easy. This learning exercise turned into a successful business. For 14 years this e-Commerce site supported a garment manufacturing operation I owned which processed 100,000 orders with sales totaling 5 million dollars. At one time I had a staff of 12 people working out of a large commercial building. The front end of the e-Commerce website was re-written 4 times as technologies improved. Rising labor and material costs eventually put a stop to the business.

## Independent IT Contractor Experience

Jan 2019 to Current

### Payroll Block

Conifer, CO

#### .Net Developer/Architect

##### Tasks Performed

*Create Payroll Solution:* A web application was created using Angular 11.2, RxJS, Bootstrap and JQuery. The solution was comprised of various modules that were lazy loaded. Two phase security was implemented using IdentityServer OAuth2. The solution can be sold as SaaS as well as a shrink wrap product. Many custom controls were developed for reuse in other projects such as a Splitter, Tree Control, Task Bars, Modal Dialogs, Input Controls, etc.

*Create eCommerce Website to sell and market the Payroll Solution:* Using the same development tools the eCommerce website was created using Angular 11.2, RxJS, Bootstrap, JQuery, the solution was comprised of various modules that were lazy loaded.

*Create RESTful Services to Support Web Client Requests:* A number of Controllers with single responsibility were created. They were built as RESTful services that supported User and Role based security. The backend services were designed with a layered architecture that implemented a Business, Model, Common and Service Interface Layer. Roslyn was implemented so the payroll formulas can be maintained dynamically. The production services are hosted on Azure and an inexpensive Cloud provider is used for development and testing.

*Design and created Database:* A database was designed and created to store the information for the above solutions and maintained using LINQ and the ORM Entity Framework Core Code First.

##### Skill Set

Angular 11, C#, Azure, JavaScript, TypeScript, Identity Server, OAuth2, ASP.Net Core 3, Entity Framework Core, RESTful Services, JSON, HTML5, CSS3, Bootstrap, SQL Server, LINQ, Roslyn

Nov 2019 to Sept 2020

Jul 1996 to May 1997

### ADP and their Clients

Remote, Wheatridge CO

#### .Net Developer/Architect

##### Tasks Performed

*Develop and Architect solutions:* Created ETL solutions to provide sensitive data to produce tax, payroll and HR reporting.

*Develop and repair various stock exchange trading applications:* Initially came in and repaired a long list of bugs and architectural issues. Once the solutions became stable I helped design and build new features.

##### Skill Set

C#, C++, Angular 8, TypeScript, Azure, OAuth2, ASP.Net Core, Entity Framework Core, RESTful Services, JavaScript, JSON, HTML5, CSS3, Bootstrap, SQL Server, LINQ, Net 4.7

Oct 2019 to Nov 2019 &  
Sept 2016 to Mar 2017 &  
Sept 2004 to Feb 2005

**Nelnet**  
Highlands Ranch, CO

## **.Net Developer/Architect**

### Tasks Performed

*Architect and built a website to manage application content for the same website and mobile phones:* The website and phone applications have been designed so they can be branded and customized as a customer's own unique website and phone application. The website that was built using Asp.net Core also controls the configuration of the devices and what applications are available. Drag and drop behavior was implement to make configuring devices simple. Knockout and Angular 2 were used for UI development.

*Build RESTful services to support client application requests:* Created controllers to support the requests of the client applications. Entity Framework Core and code first has been implemented to support database interaction. A layered architecture has been implemented to offer ease of maintenance and the best reuse of code. AWS Microservices have been implemented to support client requests.

*Develop mobile phone applications:* Using Xamarin I helped develop various views and components for mobile devices.

### Skill Set

Angular 8, C#, Knockout, WPF, Xamarin, TypeScript, MVC6, ASP.Net Core, Entity Framework Core, .Net 4.6, RESTful Services, Java Script, J-Query, JSON, HTML5, CSS3, XAML, C#, Bootstrap, SASS, VB.NET, Razor, WCF, SQL Server, LINQ, Microservices, VB.Net.

Nov 2018 to Jan 2019

**Janus Henderson**  
Cherry Creek, CO

## **.Net Developer/Architect**

### Tasks Performed

*UX Design/Development:* Delivered a complex WPF application that generated client portfolios. Started by working with business owners to better understand the requirements. With an Agile approach, in under 2 months I was able to fulfill the client's requirements with a modern looking UI that was intuitive. Using MVVM I was able to deliver a solution with zero code behind making future maintenance easy. The application has been distributed around the world.

*Developed RESTful Services and a SQL Server Database to support the UI:* Using Entity Framework Core Code First I designed and developed a new database and a set of RESTful services to support the client application's requests.

*Developed features that were above and beyond the original requirements:* Was originally brought in on a short 2-month contract that was extended 30 days so I could add additional desired features that the client was excited to be able to deliver with their first release.

### Skill Set

WPF, MVVM, Entity Framework Core, RESTful Services, C#, SQL Server, LINQ, JSON.

Feb 2018 to July 2018

## **Nordstrom**

Seattle, WA

### **.Net Developer/Architect**

#### **Tasks Performed**

*Created a superior knock-off of Tableau's Promotional Analysis Dashboard.* The UI was developed in Angular 6 using D3.js for developing the complex charting.

*Developed RESTful Services to support the UI:* A Web API was created using Asp.net Core and C#. Entity Framework Core Code First was used to access, generate and maintain the database. I originally designed the database using SQL Server which I later migrated to MySQL for cost reasons.

*Created an ETL solution to move a billion+ rows of data from multiply data sources into a single aggregated repository hosted in the AWS Cloud:* JAVA was used to build a component to extract data from multiply huge Oracle Databases using PL/SQL.

#### **Skill Set**

Angular 6/5, JAVA, D3.js, React.js, ASP.Net Core, Entity Framework Core, RESTful Services, AWS Cloud, JavaScript, JSON, HTML5, CSS3, C#, Bootstrap, LINQ, TypeScript, WPF, MySQL, SQL Server, Oracle.

Mar 2016 to Aug 2016

## **Exelon Nuclear Energy**

Baltimore, MD; Philadelphia, PA; Chicago IL

### **.Net Developer/Lead Architect**

#### **Tasks Performed**

*Counterterrorism:* In the interest of national security all details are confidential.

#### **Skill Set**

.Net 4.6, C#, WPF, WCF, ASP.Net, HTML5, Web API, RESTful Services, Entity Framework, LINQ, SQL Server, Oracle, JSON, Windows Service, ETL, UML

Jan 2016 to Mar 2016

## **CME America**

Golden, CO

### **.Net Developer/Architect**

#### **Tasks Performed**

*Designed and wrote a new website.* The new website was designed to allow existing customers to gain access to their product service history and to request product quotes. An interface to MS Dynamics was created to query content.

*Architect and create a content management system:* The content management application is a Windows client. The content of the website is managed from this application including dashboard content and the companies' complete product inventory.

#### **Skill Set**

MVC5, WPF, .Net 4.6, C#, ASP.Net, HTML5, Web API, Razor, RESTful Services, Entity Framework Code First, LINQ, IIS, Cloud Services, SQL Server, JSON, J-Query, Bootstrap, JavaScript, CSS3

Sept 2015 to Nov 2015

### **Senior .Net Architect**

## **Newmont Mining**

Centennial, CO

### **Tasks Performed**

*Perform Vulnerability and Software Quality Audit.* Newmont Mining enterprise solution which is used to process drill-hole samples was audited from end to end. The audit included many complex applications written in various languages all supported by Microsoft. The audit also included a review of their SQL Server database. A large number of vulnerabilities were identified and for each a risk and recommendation were defined.

*Give Developer and Test Recommendations:* Dozens of architectural recommendations were offered to improve the quality and performance of Newmont Mining's enterprise system. I was also able to supply recommendations to improve the quality of their code including best practices for unit testing, integrated builds, agile management, documentation improvements, automated testing, software profiling and more.

### **Skill Set**

MVC5, .Net 4.6, ASP.Net, HTML5, Web API, Restful Services, Silverlight, Entity Framework, SQL Server, AJAX, JSON, J-Query, JavaScript, MFC, C#, WCF, Web Services

Jan 2015 to Sept 2015

### **.Net Developer/Architect**

## **Jeppesen / Boeing**

Centennial, CO

### **Tasks Performed**

*Build and help design modern WPF Smart Client User Interfaces for various aviation software products for the Department of Defense and private sector.* Due to the nature of the industry the details of the projects I played a role on will not be disclosed.

*Build various WPF Custom Controls:* Created and helped design modern industry specific reusable WPF custom controls.

*Discovered and repaired memory issues.* Using various memory profiling tools memory issues were discovered and solutions implemented.

### **Skill Set**

NET 4.5, C#, WPF, Telerik, JSON, RESTful Services, XAML, MVVM, OOD

Jul 2014 to Sept 2014

### **.Net Developer/Architect**

## **Phizzle**

Broomfield, CO

### **Tasks Performed**

*Architect and built an ETL System.* The ETL System "PhizzleConnect" was designed to periodically extract, transfer and load large amounts of fan profile data from professional sporting teams for marketing purposes. I was given a prototype which was a good starting point but only the data mapping components were reusable. Reflection was used extensively to create and dynamically work with new objects. Implementing the Provider-Pattern a generic data provider was created for each of the various methods data could be extracted which included providers for SQL Server Databases, MySQL Databases, CVS files, and RESTful Services. If the needs of the data extractions didn't fit one of the generic models a custom client data provider was created. The target data repository loaded was a DynamoDB database. This project was completed successfully a couple months early and is a core product of Phizzle.

*Architect and built an ETL Administrator Application.* This application was built using WPF and it manages the DynamoDB tables and displays the contents of various tables for auditing purposes.

*Architect and built RESTful Services.* I built various RESTful services using both Web API and MVC4.

### Skill Set

.NET 4.5, C#, MVC4, WPF, Entity Framework, JSON, Web API, RESTful Services, XAML, MVVM, OOD, SQL, SQL Server, MySQL, DynamoDB, Reflection

Nov 2013 to Mar 2014

**Starz**

Centennial, CO

**.Net Developer/Architect**

### Tasks Performed

*Architect and build two applications used by the Quality Control department to play and document the state of Starz's media content.* Both were built as WPF Windows applications with a click once deployment. Telerik's WPF controls and theming were used extensively. The MVVM Pattern was used and C# was the language of choice. These client applications consumed Restful Services which return JSON packets. The first application successfully delivered into production was built to document the flaws of Starz's content. The second application successfully delivered into product is a sophisticated Media Player

### Skill Set

.NET 4.5, C#, WPF, JSON, RESTful Services, XAML, MVVM, OOD, Expression Blend, Telerik, SQL Server

Oct 2012 to Dec 2013

**PetroWeb**

Denver, CO

**.Net Developer/Architect**

### Tasks Performed

*Architect and build an Oil/Gas Reserves Management module.* The system was designed to be used by engineers and geologist to determine the remaining oil in place. The module compliments the generation of GIS mapping and grids for analysis. The module contained about 20 sophisticated views all built in C# and WPF. Telerik controls were used for charting and other features not supported by Microsoft's libraries.

*With Machine Learning created and built a component to produce an Oil or Gas Well's Decline Curve using the Hyperbolic Equation.* The decline curve is a method used in the oil industry to estimate the remaining production for a given well. To determine the values used in the Hyperbolic Equation I used Microsoft's Solver Foundation. I built three versions of the component. The first version I built was for a WPF client/server implementation. The second version was built targeting a WPF thin client with the business logic residing on the server as middleware. I used WCF to build a TCP/Binary communications channel to send requests/responses to and from the middleware. Lastly, I built a version of the component in Silverlight. The Silverlight component's requests were fulfilled by an OData Service with the data being marshalled in JSON Lite. The implementation was built using an n-tiered architecture which allowed the same business logic class to be used in all three versions of the component. If required, the host can also expose the business logic to external consumers via a SOA Http/Soap interface by simply adding an additional WCF binding definition.

### Skill Set

.NET 4.5, C#, WPF, Machine Learning, Silverlight 5, WCF, OData, JSON Lite, RESTful Services, Microsoft Solver Foundation, XAML, LINQ, MVVM, OOD, Expression Blend, Entity Framework, Telerik, SQL Server, MVVM Lite

May 2011 to Apr 2012

## Crop Product Services

Loveland, CO

### .Net Developer/Architect

#### Tasks Performed

*Repair a new Silverlight Payroll System that was over a year behind schedule.* The existing Silverlight reporting solution was a failure so I changed the architecture of the application to inject SSRS. With SSRS implemented the reporting performance, quality of reports and exports exceeded all expectations. I also repaired a large number of bugs/mistakes in the usage of Unity, MVVM and RIA Services that were causing grave errors to occur. The performance of the Silverlight User Interface was poor due to the complex processes that were being performed to present data. I moved these complex processes to background threads on the server. The performance of the UI went from 5 minutes to present a view to less than 2 seconds. In the end, all fixes were released to a very happy user base of approx. 40,000 users. My efforts saved a multi-million-dollar project from being dumped.

*Repair a new Sales Representative Commissions Payment Application.* Again, I was handed off an application that was behind schedule from another development team. The Asp.net UI was only 30% complete and was riddled with bugs. I created a couple new subsystems as MEF Parts in Silverlight to complement the existing UI. Next I replaced the Asp.net shell and menu system with a new framework written in Silverlight. I quickly ported the remaining Asp.net pages to Silverlight views and created an additional eight missing views. RIA Domain Services were developed on the backend to support the database maintenance requests of the UI. The system was designed to include a dozen complex SSRS reports that I built and seamlessly integrated into the Silverlight application. A Windows Service was created to execute long running processes that calculated commissions real-time. The UI communicated to the Windows Service using WCF Services that support high speed TCP and binary data transfers. To complete the task a large number of database design changes were required along with a great deal of optimization to achieve acceptable performance.

*Teach other developers:* Taught group classes on MVVM, Reporting Services and Silverlight. For these classes I created a lesson plan and a complete software example of how to implement Reporting Services into a Silverlight solution. To teach other developers MEF and the usage of SHIELDS I created a prototype of the existing application using newer design patterns.

#### Skill Set

.NET 4.0, C#, Silverlight 5, MVC3, WCF, RIA, XAML, MEF, LINQ, PRISM, MVVM, OOD, Java Script, HTML, Web Services, Expression Blend, SSRS, Entity Framework, Telerik, SQL Server, MVVM Lite

Feb 2010 to Oct 2010

## Fidelity

Boston, MA

### .Net Developer/Architect

#### Tasks Performed

*Build a next generation Trading System:* Build Silverlight modules/parts that comprise an advanced Trading System. Add new behavior to existing Silverlight modules. This system was successfully released to 1/2 million users. **The final product was given awards and demonstrated by Microsoft at their Mix Conferences.**

*Architect, build and lead a team of software engineers to create a new MEF part that presents financial charts & graphs:* I managed a team of 3 engineers to successfully complete the task.

*Improve design patterns:* Create architectural UML design documents offering recommendations to improve the implementation of existing PRISM and MVVM design patterns.



*Architect messaging classes used in a high-volume communication layer.* The message classes offered security, the ability to gather performance metrics and a high level of reusability. Development and testing was completed with the implementation of WCF Services.

#### Skill Set

.NET 4.0, Silverlight 4, C#, XAML, WCF, MEF, LINQ, PRISM, MVVM, OOD, Java Script, html, AJAX, Web Services, Expression Blend 4.0

Jun 2009 to Sep 2009

### Webroot

Boulder, CO

#### **.Net Developer/Architect**

#### Tasks Performed

*Develop various UI components for the next generation of Webroot's popular antivirus software.* Created the client components for one of the major sub-systems using Silverlight 3.0, XAML and Expression Blend.

*Debug and repair system wide flaws to help provide a solid product.* In doing so I re-architected much of the UI to a MVVM design pattern. Webroot's Antivirus software was successfully released to 6 million customers.

#### Skill Set

.NET 3.5, Silverlight 3, C#, XAML, JSON, Expression Blend 3.0, LINQ, MVVM

Oct 2008 to Mar 2009

### Penton Media

Loveland, CO

#### **.Net Developer/Architect**

#### Tasks Performed

*Architect and develop a web-based application to build simple web forms.* The Web Form designer was built in Silverlight to assist business analyst with developing web pages. The application interacted with the web pages DOM object extensively to server up a true visual representation of the web page being created. The application was designed as a thin client that utilized Web Services built using WCF to communicate with distributed services. The services supported all the business logic of the store front. Services were built using SOA architecture and this middleware was designed with a layered approach which utilized LINQ to SQL to manage persisted data. Expression Blend and Design were used to help develop a rich user interface.

#### Skill Set

.NET 3.5, WPF, WCF, LINQ to SQL, C#, XAML, Silverlight 2, Enterprise Library, SOA, OOD, Expression Blend and Design, SQL Server, ASP.NET, Java Script, HTML, Web Services

Jun 2008 to Oct 2008

### Los Alamos National Laboratory

Los Alamos, NM

#### **.Net Developer/Architect**

#### Tasks Performed

*Lead the development of a new application.* Due to security reasons, I can't give explicit details of the application built. What I can share: I architected the application to have n-tiers. The application's user interface was built using WPF and XAML. Expression Blend and Design were used to help develop a rich user interface. LINQ to SQL was used to create a data access layer to manage a SQL Server database. Microsoft's Enterprise Library application blocks were used for data caching and event logging.



## Skill Set

.NET 3.5, WPF, LINQ to SQL, C#, XAML, Silverlight 1, Xceed, Enterprise Library, SOA, MVVM, OOD, Expression Blend and Design, SQL Server, TFS

Jan 2008 to Jun 2008

## Pro Rodeo Cowboys Association

**.Net Developer/Architect**

Colorado Springs, CO

## Tasks Performed

*Architect and lead the development of two new systems.* The first system Corral was designed to support rodeo participations with profile, statistics and statement information. The second system Rawhide was designed for in house CSR support. CSR's are able to manage members and the rodeos they participate in.

*Lead and participate in the development of a smart client application named Rawhide to support the management of rodeos.* The smart client was built using WPF and was setup with one touch deployment. A MVC pattern was implemented to help produce a cleaner code base. Custom controls were developed to add security, localization and standardization. Expression Blends was used to add flair.

*Lead and participate in the development of a web client named Corral to support rodeo participants.* The web client was built using Asp.net 3.5. The application was prepared for localization by the implementation of the hub spoke model of string resources. Server web controls were developed to add security, localization and standardization.

*Build distributed services to support the business logic of Corral, Rawhide and all future application developed by PRCA.* A Windows Service hosts the middleware services. A SOA was implemented to expose the required client services. High-speed communications between the clients and servers were enabled via WCF. The system was designed to support a server cluster that utilized network load balancing to achieve scalability, fail-over and performance. A layered architecture was implemented to give separation to the Business Logic, Data Access and Domain objects. The system was designed to support multiply database vendors concurrently with the use of the Enterprise Library's Data Access Application Block. The Caching Application Block and multithreading were both implemented to boost performance. Message logging was accomplished also with the use of the Enterprise Library.

## Skill Set

.NET 3.5, WPF, WCF, WF, Xceed, C#, XAML, MVC, Enterprise Library, SOA, OOD, UML, XML, Expression Blends, DB2, SQL Server, and Windows Vista

Jul 2007 to Dec 2007

## IHS

**.Net Developer/Architect**

Centennial, CO

## Tasks Performed

*Architect and lead the development of an Enterprise Workflow Solution.* Created design documents in UML for a solution using Microsoft Workflow Foundation. The design followed SOA patterns.

*Developed a Workflow Designer user interface for business analysts to create and maintain workflows.* The Workflow Designer was built as a thin client using WPF and the designer components supplied by Microsoft. I created a couple initial Workflows and a few supporting Custom Activities.

*Lead a small team of software engineers to develop distributed services to support the Workflow Designer's requests.* I developed a Windows Service that hosted the Workflow Runtime Engine used to execute workflows and to host the supporting services. Using WCF I built a high-speed communications layer to give the Workflow Designer application the ability to make distributed requests.

## Skill Set

NET 3.0, WPF, WCF, Workflow Foundation, C#, XAML, XOML, SOA, OOD, UML, XML, Expression Blends, Infragistics, SQL Server 2005, TFS, Windows Vista, and XP

Dec 2005 to Jul 2007

## Environmental Support Solutions

**.Net Developer/Architect**

Tempe, AZ

### Tasks Performed

*Architect an n-tiered distributed system to support existing applications.* Developed design documents in UML to define a new distributed system using .NET 3.0 and WCF. SOA methods were implemented to allow components to easily evolve. The design included server fail-over, redundancy and durable queues to guarantee reliability. Load balancing, multi-threading and queuing were implemented to gain optimal performance. For added performance ESS's internal applications communicate via TCP and used binary data marshalling. For external consumers, the system supports Web Services and SOAP data marshalling with a well-published interface.

*Lead a team of 30+ software engineers to implement localization changes.* Tasks were outlined, assigned to software engineers and status meetings were held to monitor progress. My approach was hands on by participating in writing code changes. My added role was to complete the most complicated programming tasks such as creating Web Controls, developing Java Script and making changes to critical business logic. The localization changes were successfully completed on schedule and delivered to China.

*Manage a team of testers.* The end client British Petroleum had assembled a series of acceptance tests that the application had to comply to. I created a series test scripts/use cases that would exercise required functionality. My team of test engineers developed Load Runner scripts that automated the test scripts that were used to create performance reports.

*Created architecture enhances to improve application performance.* Create a report of performance enhancement recommendations to a series of application modules. Many of the performance enhancements I personally implemented, others were assigned to the team of software engineers or are under review to be implemented in future releases.

## Skill Set

.NET 3.0, WCF, C#, SOA, .NET Remoting, Microsoft Application Blocks, UML, Web Controls, AJAX, ADO.NET, ASP.NET, HTML, XML, Java Script, IIS, NDOC, Windows Vista, SQL Server 2000

Jun 2006 to Feb 2007

## BCD Travel

**.Net Architect**

Atlanta, GA

### Tasks Performed

*Create architectural design documents from requirement specifications.* Develop UML component diagrams, class diagrams and the documentation to depict the design of a new travel industry order entry system.

*Architect and build the communications layers to support various distributed applications.* Web Service interfaces were developed to support External Consumers. A high-speed communication layer was built to support internal client applications. This high-speed communications layer was built using .Net Remoting that supported TCP channels and binary data marshalling. WCF client and server communications were developed to support internal applications and external consumers. A communication layer was built to support message broadcasting using Sockets. The broadcasting system was designed to support remote clients behind external firewalls that use NAT.

*Architect and build an Enterprise Service Bus.* The Enterprise Service Bus was designed using the Service Oriented Architecture design pattern. The simple interfaces were published using WSDL files. The bus was designed to support requests made to multiple Travel industry providers for inventory, profile and policy information.

*Lead a team of 20 software engineers.* Develop a project plan to assign tasks to colleagues with time estimates. Guide a team of developers to build applications from formal designs. Support the needs of colleagues to help solve difficult software engineering problems.

### Skill Set

.NET 3.0, C#, SOA, Enterprise Service Bus, Windows Communications Foundation WCF, Workflow Foundation WF, .NET Remoting, Web Services, UML, Enterprise Architecture Design Tools, Infragistics, Web Controls, User Controls, .NET Plug-in, ADO.NET, ASP.NET, HTML, XML, Java Script, IIS, NDOC, Windows XP, SQL Server 2005

Mar 2005 to Oct 2005

**TimeCentre**  
Westminster, CO

### **.Net Developer/Architect**

### Tasks Performed

*Architect, design and develop the migration of existing legacy system to .NET.* Create UML Class, Composite, Activity, Use-Case and Deployment diagrams. Created an object-oriented layered architecture containing a business logic, domain object, data store abstraction, communication and common assemblies. The communications layer was developed using .NET Remoting and .NET Sockets. Major design features include: Load balancing, fail-over, unlimited scalability, Windows Authentication, multithreading, detailed error reporting, drag and drop, implementation of Infragistics Web Form controls. A SQL Server database was accessed via a data store abstraction layer inherited from ADO.NET.

*Build a Distributed Processing Server (Time Clock Server) to support the collection of data and the maintenance of Time Clocks.* The client's existing server had all sorts of serious issues; it was unreliable, had poor performance, lost data and required a large support staff. The new server that I successfully delivered serialized all client requests before processing to guarantee 100% reliability. In most cases after a request was successfully received and serialized it was processed asynchronously using multithreading. Asynchronously processing information boasted performance over 100 times from the old legacy system. Since time clocks communicate using sockets reusable Client and Server socket classes were developed to support communications. To allow client applications to interact with the Time Clock Server it was built as a .NET Remoting server. Reusable Remoting Client and Server classes were developed to support communications. Error, warning and informational messages were persisted in the Windows Event Viewer and in a central repository to allow monitoring. Now released to the client's major customer's reliability has been shown to be 100%, performance is far beyond the needs of existing customers, and it is expected that the support staff will be reduced by over 50% once the product is push out to all 2000 existing customers.

*Designed and developed the Web Form User Interface to support physical time clocks and the Time Clock Server.* About a dozen web pages were created to support the configuration information used to communicate with Time Clocks. One of the more impressive features of these pages was that I included a tree control that supported drag and drop to ease the setup and maintenance of time clocks. This tree control also gave a snapshot of the entire systems status with a visual operating status for each time clock and server. Another extraordinary feature was the display of all the error, warning and information messages that had been collected for the complete system.

*Train all senior and junior software engineers in .NET, C# and OO methodologies.*

### Skill Set

.NET, C#, .NET Remoting, Sockets, Infragistics, UML, Window's Authentication, SSL, Web Controls, User Controls, Composite Controls, Windows Service, Multithreading, ADO.NET, ASP.NET, HTML, XML, SQL Server 2000, Java Script, IIS, NDOC, Windows XP

Dec 2004 to May 2005

## Duke Energy

Houston, TX

### .Net Developer/Architect

#### Tasks Performed

*Architect, design and develop a new distributed processing system to produce product analysis from thousands of oil wells.* Create UML Class, Composite, Activity, Use-Case and Deployment diagrams. Created an object-oriented layered architecture containing a business logic, domain object, data store abstraction, communication and common assemblies. The communications layer was developed using .NET Web Services. Major design features include: Load balancing, fail-over, unlimited scalability, Windows Authentication, loosely coupled to Web Services, and multithreaded Windows Service. An SQL Server and Oracle database was accessed via a data store abstraction layer inherited from ADO.NET.

*Create a Field Location Window's Service application to proper gate data from the field to a Server Cluster to be processed.* Daily thousands of oil well meters send their analysis data to regional instance of this Windows Service. A dozen or more instances of this Window's Service application are deployed around the United States. The Windows Service recognizes the delivery of the meter analysis data and forwards the information to a centrally located server cluster for processing. The Windows Service was designed to handle system failures to guarantee 100% delivery of all information. The service was written using C# and uses multithreading to perform its task as efficiently as possible.

*Build a Web Form "System Console" application to monitor and control the complete system.* The console supplied a complete error history of all the components in the distributed system, it produced statistics on the processing of data, allowed data to be processed on demand, and supplied an interface to maintain all the configuration information for the distributed systems. The System Console was built as a thin client with ASP.NET, C#, HTML, Jscript, Web Controls, User Controls, Web Services. Required drag & drop and file selection behavior that could not be support by a Web Form application was added with a .NET Win Form Composite Control as a plug-in.

*Develop a set of Web Services to support client processing.* The first web service supported the Field Location Window's Service requests to process well meter data, provide configuration info, forward results onto consumers, and to save error history & status notifications. A second Web Service was built to support all the business logic of the System Console Web Form application. Lastly a third Web Service was developed and deployed at the location of the consumers of the well meter data so they could receive the process results. The web services were written in C#, data was marshaled in SOAP packets, SOAP packets were validated using XML schemas, and for performance multithreading was used extensively. Redundant servers are deployed behind a set of foundry switches to provide optimal load balancing and fail-over.

*Architect and lead team of developers.* Developed a project plan, assigned tasks, did code reviews and performed technical interviews

#### Skill Set

.NET, C#, Web Services, UML, Window's Authentication, Web Controls, User Controls, Composite Controls (used as a .NET Plug-in on web pages), Windows Service, Multithreading, ADO.NET, ASP.NET, HTML, XML, SOAP, SQL Server 2000, Java Script, IIs, Windows XP

Mar 2004 to Nov 2005

## Caption Colorado

Denver, CO

### .Net Developer/Architect

#### Tasks Performed

*Architect, design and develop distributed processing system.* The communications layer was developed using .NET Remoting complimented by Web Services. Web Services acted as a thin communications abstraction layer for external clients. Created a Load Balance and Distributed Process Servers using .NET C# that supported the client's distributed processing needs. Major design features include: load balancing, fail-over, Web Clustering, unlimited scalability, inter-process messaging, loosely coupled to .NET Remoting, servers run as Window Services and are multithreaded. Created an object-oriented layered architecture containing a business logic, domain object, data store abstraction, and services assemblies. An SQL Server database was accessed via a data store abstraction layer inherited from ADO.NET.

*Re-architect and develop a work force management application.* Changed the architecture of a .NET Web Forms based application to include Iframes, utilize caching and client-side Jscript processing. The use of Iframes, caching and client-side Jscript reduced the server load of data transferred to the client application by over 50%.

*Add Web Services Methods.* I created and enhanced many Web Services methods for the work force management application and to fill the requests of developers from other projects.

*Normalize a SQL Server database and improve queries.* Analyzed and optimized database stored procedures. Reduced the number of stored procedure queries calls by writing stored procedures that returned more complete results sets. After analyzing the stored procedures, I was able to define and implement better indexing. The stored-procedure and indexing optimization resulted in a huge increase (1000%, over ten times as fast) in application performance. I defined automated weekly database procedures to optimize database performance.

*Create custom Web Controls.* I designed and developed a handful of custom .NET composite controls using C# to satisfy redundant behave amongst ASP.NET Web Pages. Controls created included a DateTime Picker, Customer List, Employee List, Web Page Header and more.

#### Technical Skill Set Utilized

.NET, C#, Remoting, Web Services, SSL, AJAX, Window's Authentication, Web Controls, Multithreading, Window Service, ADO.NET, ASP.NET, HTML, XML, SOAP, SQL Server 2000, Java Script, IIs, VBScript, Stored Procedures, Windows XP

Jan 2004 to Mar 2004

## Verient Video Solutions

Westminster, CO

### .Net Developer/Architect

#### Tasks Performed

*Architect, design and develop distributed processing system.* The distributed processes communicate using .NET Remoting. The clients are a mixture of legacy C++ and newly developed C# applications. Using Inter Ops the old C++ clients are enabled via COM to make Server Activated calls. Created a Load Balance and Distributed Process Servers using .NET C# that supported the client's distributed processing needs. Major design features include: load balancing, unlimited scalability, loosely coupled to .NET Remoting, Servers run as .NET Services and are multithreaded. Created an object-oriented layered architecture containing a business logic, domain, data store abstraction, and services assemblies. The data stores of a SQL Server database and XML files were accessed via a data store abstraction layer inherited from ADO.NET. Upon completion, this new system was successfully deployed to a few thousand Home Depot locations.

*Take an existing video motion recognition system and dissect the software into an object model while enhancing behavior and the accuracy of results.* Took a complex Win Form application written in C# and moved the behavior and attributes into C# classes. Create a thin-client application from an existing fat-client application. This was accomplished by taking all the business logic out of the UI Layer and putting it into middleware. Once the business logic was placed into an assembly I created a new .NET Window's Service that reports the same motion data without the graphical representations.

### Technical Skill Set Utilized

.NET, C#, .Net Remoting, Web Services, OO Methodologies, Multithreading, ADO.NET, ASP.NET, Windows Service, Inter Ops, XML, SOAP, HTML, SQL Server 2000, Java Script, IIS, C++, MFC, Active-X, Windows XP

Oct 2003 to Dec 2003

### Calpine

Fort Collins, CO

#### **.Net Developer/Architect**

*Architect, design and develop the Inadvertent Energy Account and Reporting System.* Create the IEAR Website. Developed business logic, domain, services and data store abstraction layered assemblies using C#. Build back-end services to support various client applications.

### Technical Skill Set Utilized

.NET, C#, Web Services, ADO.NET, ASP.NET, IIS, HTML, DHTML, Style Sheets, SQL Server 2000, Java Script, Web Services, Infragistics

Sep 1999 to Oct 2001

### CSG Systems

Englewood, CO

#### **Senior Developer/Architect**

*Design and develop a back-office application to support the new Order Entry System.* I created an MDI application using VC++ and MFC to support the Order Entry System. This system was comprised of a few dozen data capture screens used to setup the database for the operation of NextGen. The library Objective Grid Pro from Stingray was used to create complex data grids for data capture. ODBC was used in an abstraction layer to communicate to an Oracle database. I internationalized this application so it may be implemented in Mexico, Germany as well as in the USA.

Jul 1999 to Sep 1999

### StorageTek

Westminster, CO

#### **Senior Developer/Architect**

*Port a tape backup system from the UNIX platform to Windows NT.* Took a dozen different UNIX based applications and ported the code into VC++ Windows Services

Jul 1999 to Sep 1999

### Columbine JDS

Denver, CO

#### **Senior Developer/Architect**

*Architect, design and develop a Media Analysis Reporting Tool.* I created an SDI titled Mart that reported sales information in various formats. There were 15+ plus screens used to report the data that I built using VC++ and MFC. I built this application as a thin client that communicated to a distributed server using DCOM.

*Architect, design and develop a server to support the Media Analysis Reporting Tool.* I wrote the server using VC++ and DCOM. The sales information that was processed by the server was stored in an Oracle Database within a

Star Schema. I wrote a database abstraction layer using ODBC and MFC Record sets to access and update the database.

Nov 1997 to Nov 1998

## **Jones Cyber Solution**

**Senior Developer/Architect**

Englewood, CO

*Architect, design and develop a Media Analysis Reporting Tool.* I created an SDI titled Mart that reported sales information in various formats. There were 15+ plus screens used to report the data that I built using VC++ and MFC. I built this application as a thin client that communicated to a distributed server using DCOM.

*Architect, design and develop a server to support the Media Analysis Reporting Tool.* I wrote the server using VC++ and DCOM. The sales information that was processed by the server was stored in an Oracle Database within a Star Schema. I wrote a database abstraction layer using ODBC and MFC Record sets to access and update the database.

Feb 1995 on/off Nov 1997

## **US West**

**Senior Developer/Architect**

Denver, CO

*Architect, design and develop point of sales kiosk.* I created various dynamic linked libraries in VC++ to support a team of developers who used Director to create the GUI for the kiosk. The GUI was a thin client that depended on my libraries for its business logic. The libraries on the kiosk communicated to a remote server using sockets and RAS that I wrote in VC++. I also created the remote server using VC++ that supported the kiosk's business logic. I used ODBC to build an abstraction layer to a Watcom database. Once Watcom dissolved the ODBC abstraction layer ported right over without any code changes to a Sybase database. I also created various C++ utility programs to support kiosk operations.

Mar 1996 to Jul 1996

## **TCI**

**Senior Developer/Architect**

Englewood, CO

*Port the Subscribers Work Order Application from UNIX to Windows.* The application was written to be cross platform using standard C++ and the Neuron Data application framework. I worked on enhancing and debugging the code until it would compile on Windows. Once the code compiled on Windows I started debugging why it wouldn't run correctly. 90% of the issues came from Neuron Data's application framework not being completely cross platform ready as advertised. I would find a problem isolate into a small application and send it off to Neuron Data and wait for a patch. Unfortunately, we didn't have the source code to fix the bugs ourselves.

Jan 1994 to Jun 1995

## **Industrial Computer Systems**

**Senior Developer/Architect**

Evergreen, CO

*Develop Trucking Dock Management Software.* Created deliverable object-oriented design documents using Rational Rose. Help develop OS/2 and Windows client applications. I acted a mentor and team lead to many junior developers.



## W2 Employment History

Feb 1989 to Jan 1994

### E.K Williams & Company

#### Manager of Software Engineering

Westminster, CO

##### Tasks Performed

*Architect, design and develop a vertical market accounting system for the petroleum industry.* Working with a pool of 200+ franchise offices of accountants and a couple dozen existing clients we designed an A/R, A/P, Invoicing, Payroll, Work Order, Inventory module and a couple vertical market applications specifically for gas service stations and convenience stores which integrated with the standard accounting modules. Managing a team of 4-8 developers we built the modules using Microsoft 'C' and VC++ once it came on the market. During the development and maintenance process I wore every hat in the full life cycle including analyst, designer, architect, developer, tester, support, DBA, implementation and even sales. Thousands of copies of these modules have been sold around the world and are known as EKW\*Manager.

*Architect, design and develop a System for EKW Franchises to produce Profit & Loss and Operating Statements.* With the same group of 200+ EKW Franchise offices we created a design for STARS (Standard Accounting Reporting System). With the help of EKW's Holland office and just one other developer we created this system using VC++ and Btrieve as a data store. It included 40+ different data reporting and data capture screens and 20+ complex reports.

*Architect, design and develop a PC based POS (point of sale).* I designed the system and then worked with another one of my developers in building the POS using VC++. We integrated external devices to read credit card and bar codes. With the integration of the credit card device we wrote the software to batch daily sales to a credit card clearing house.

*Produce Statistical Reporting on Sales and Expense data.* Taking the data from thousands of EKW William's Clients I produced a database of sales and expense data. I then created advanced statistical analysis software in VC++ to produce sales and expense data based on demographics. Customers like Exxon and Chevron were able to suggest demographics and we were able to produce sales and expense estimates. I then produced a shrink-wrapped version of this application that we sold to the major oil companies.

*Manage a team of developers, test group and support staff.* I lead a group of 4-8 developers, 3-4 customer phone support folks and a various number of testers at times. I was in charge of hiring and firing, managed the scheduling, resolving issues, ran weekly meetings and I did performance reviews.

Mar 1986 to Jul 1998

### City of Santa Barbara

#### Computer Programmer

Santa Barbara, CA

##### Tasks Performed

*Maintain the Law Enforcement Telecommunications Network for two counties.* Install new and repaired existing systems for over 100 different police departments, sheriff departments, fire stations, jails and the harbor patrol. Trouble shoot and resolved different communications problems that occurred between DEC PDP1140 messages switches and the multitude of law offices that were sent data. Enhanced and updated the assembler code that ran the message switches.

*Create and maintain existing software systems.* Updated and developed various crime reporting applications used by the City of Santa Barbara's Police department. The applications were written using Basic, FORTRAN, Assembler, COBOL and DCL DEC 750 Mini Computer.

*Assist with the installation of a new CAD (Computer Aided Dispatch) system for the Cities Police and Fire departments.*

Mar 1984 to Aug 1986

## **Hi-Temp Insulation**

### **Manager of Software Engineering**

Camarillo, CA

#### **Tasks Performed**

*Design, develop and implement a complete accounting system.* Develop a complete accounting system from the ground up on an IBM System 23. The accounting system included A/R, A/P, Payroll, Inventory, Cost Analysis and MRP modules.

*Develop CNC Software for a high-tech HP cutting tool.* On an HP2000 terminal in the Basic language I created the software to control robotics. The robotics worked in a highly volatile environment to bend and cut metal. The finished product was a rocket chamber for nuclear missiles.

*Create scientific software applications.* Worked with a handful of engineers to develop various applications to perform calculations which simulated how material would react in various environments. Hi-Temp Installation developed products for the Space Shuttle, most all US fighter jets, nuclear submarines, space suits, Abrams A1 tanks, and many like products. The applications created saved man-hours and produced highly accurate statistical data.

## Education

Ventura College

Information Systems

Graduated 6/83

Santa Barbara College

Computer Science

Continued Education

Was placed in the MGM program during high school and put in all advanced classes because my ACT score was in the one half of 1%. For giggles I passed the GED around my 16<sup>th</sup> birthday and continued-on accepting my actual high school diploma early. School was never a challenge and I could have continued my education to obtain a higher degree if it was not for the high cost of education, not receiving help acquiring a scholarship and being so handsomely paid right after receiving my IS degree. The California Business Education Association awarded me a certificate for outstanding achievement for business education courses completed. I maintained a 3.5 GPA or better placing me on the Dean's list.

Completed Computer Courses: Programming (C, COBOL I, COBOL II, FORTRAN, Pascal, Basic, and Assembler), Introduction to Information Systems, Computer Programming Design, Data Entry Operations, System Analysis and Design, Information Systems Case Study.