

Summary:

- Have more than 15 years of experience in Software engineering with 10 years in Software architecture
- A software engineer willing to develop and maintain systems regardless of tools and technologies. Extensive professional experience of **over 14 years in .NET, Web and Distributed Cloud Applications.**
- Keeping up to date with the latest technologies and practices like **Typescript, Asp.net core, Angular, Microservices, Serverless architecture, Visual studio 2017** to name a few.
- Microsoft certified professional in **Windows Application Development** using **Winforms and WPF**
- Experience in working with Microsoft's **cloud technology** offering **Azure. Storage blobs, Web and worker role, tables, Azure ServiceFabric, WebJobs & WebApps** to name few.
- Experience in following **Service Oriented Architecture (SOA)**. Finding out **services** based on various parameters, separating them out, creating boundaries around them, providing means of communication via **RPC with an AntiCorruption layer** or **Messaging** based on needs.
- Expertise in architecting solutions following **architectural patterns, SOLID design principles** and **Gang of Four design patterns**. Documentation skills include C4 architecture conventions and tools such as **Visio** and Visual Studio modeling tools.
- Experience in enterprise integration patterns such as **Aggregator, Message Router, Asynchronous Messaging** following loosely coupled architecture to keep **messaging as an infrastructure concern**.
- Experience in using the **Process Manager** Pattern for managing the **long-running processes**.
- Expertise in working with **web-based API** to provide interaction to server-side data from **Single page applications (SPA)** on the Client side.
- Expertise in **Object-Oriented JavaScript** and **Design patterns in JavaScript** like the publisher, subscriber, promises and deferred, timers.
- Experience working with several **JavaScript libraries** like AngularJS, JQuery, and Bootstrap.
- Expertise in implementing and following **TDD** on browser-side using tools like **Jasmine** for Assertion, **Chutzpah** as test runner and .Net side using tools like **mUnit** for Assertion, **Moq** for mocking
- Expertise in integration with **Social Media & implementing Analytics** on the website using **Google Analytics**
- Expertise in working with **MVC 4, LINQ to Object, Entity Framework 6, Web Apis, and Unity container for IOC**.
- Expertise in implementing code quality initiatives such as Gated check-in, automated code review tools such as FxCops, etc...
- Experience in working with different persistence related technologies like **Entity Framework with SQL Server for ORM, Azure tables (NOSQL) persistence on the cloud**.
- Knowledge in working with **SSIS, SSRS** for reporting and **ETL** needs.
- Helped transition team to the **Agile** environment, following **Agile** principles for software development along with **TDD** practices.
- Experienced in setting up **TFS** and **build definitions** that would enable **Continuous Integration** and **Gated check-in** providing a complete implementation of TDD methodology.
- Expertise in keeping the infrastructure components up to date and **upgrading to the latest version** with new releases.
- Experience in implementing the solution for searching content on the website using full-featured Search Engine utility like **Lucene or SQL Server Full Text Search**..
- Expertise in **MVVM** design pattern for WPF applications.
- Expertise in reverse engineering existing systems and resolving critical issues.
- Experience in documenting the gathered knowledge and conducting knowledge transfer sessions.

- Motivated self-starter with exceptional team building, Leadership, Project Management, and interpersonal skills.
- Excellent communication and interpersonal skills. Makes conscious efforts to improve the process and ensure that coding standards and guidelines are followed in the team to maintain the high quality of the software.
- Possess the Problem Analysis skills to understand the existing framework and modules to solve the defects in them. Excellent team player.
- Expertise in maintaining legacy codebase while adding new features.
- Active in technology communities. Frequently writes technical articles on the blog (<http://www.joymonscode.blogspot.com>) and answer in StackOverflow.

Technical Skills:

.Net Technologies	: .Net 4.6.2, 4.5, 3.5, 2.0, 1.0 LINQ, Enterprise Library, ASP.NET MVC, WCF, Web Services, ADO.Net, Windows Services, WPF & Windows, Forms.Entity Framework
Languages	: JavaScript, TypeScript, C#
Cloud computing	: Azure
Visual Studio	: VS 2012, VS 2013, VS 2015, VS2017
Architecture	: Distributed computing, SOA, MVVM, Messaging and queuing.
NoSQL	: Azure Tables, MongoDB, Azure CosmosDB
Cloud Technologies	: Azure ServiceFabric, Functions, WebJobs, WebApps, Web and worker Roles, Tables, Visual Studio Online and its integration with Azure
Javascript libraries	: Angular JS, Bootstrap, JQuery, Kendo UI, Angular UI
Client-side TDD Tools	: Jasmine, Chutzpah, Moq & mUnit
Databases	: SQL Server 2008, 2012 & 2014
Designing Tools	: Visio, Visual Studio modeling tools
Web Technologies	: HTML, CSS, JavaScript, AJAX, Angular, ASP.Net MVC, Asp.net Core
Source code Repository	: TFS, Github with Visual Studio, SVN
Software Tools	: Resharper, Firebug, WinDbg, Expression Blend, F12 tools.
Networking Tools	: TCP/IP, Telnet, FTP.
Operating Systems	: Windows 10, Windows 8, Windows 7, Windows 2008, Windows XP, 2000,
Web Servers	: IIS
Social Media Integration	: Google Drive integration, Facebook, twitter feed widget integration
Analytics	: Google Analytics

Education:

- **MCTS** (Microsoft Certified Technology Specialist) for .NET Applications.
- **MBA** (Information Systems Management), Bharathiar University Coimbatore, India.
- **BE** (Bachelor of Engineering in ComputerScience), Anna University, Chennai, India.
- **Diploma** (Computer Science), State board of technical education, Kerala, India

Professional Experience:

Orion Systems Integrators Inc., Woodcliff Lake, NJ
Solutions Architect

Mar 2017 – Till date

Project - KPMG Clara in Azure (Mar 2017 - Till date)
Client - KPMG

Role - Solutions Architect

Clara is a flagship product of KPMG for auditors and higher officials. Clara started as an on-premise project and 'Clara in Azure' is a valuable initiative from KPMG to embrace cloud via Microsoft Azure. It includes defining the roadmap of what and how the cloud migration should happen. Also, it needs to define the practice of how new cloud-native applications should be developed in KPMG.

Responsibilities

- Working with Microsoft Custom Advisory Team on defining the roadmap to take KPMG Clara to cloud.
- Define and document practices for developing new cloud-native applications as well as the migration path for existing applications.
- Define the best practices for implementing continuous integration and delivery pipelines for applications.
- Carry out PoCs required for the Azure cloud migration process.

IRIS Software, Edison, NJ

May 2016 – Feb 2017

Consultant Application Developer

Project - Desktop framework (May 2016 – Feb 2017)

Client - Bank of America Merrill Lynch, Pennington, NJ

Role - Application Developer Level-V

This is a highly customizable desktop container framework to host individual applications for different user roles. WMW+ is for financial advisors. It can host a variety of applications such as pure web apps, rich client applets, and desktop apps. It provides a streamlined asynchronous communication channel for the apps to communicate with each other. Also, it keeps track of user preferences such as hotkeys, favorites, etc...

Responsibilities

- Developing the client-side framework using **WPF & WinForms** technologies present in Microsoft **.Net 4.5** framework. **C#5.0** as language and **Visual Studio 2015** as a development tool. The source control is **TFS** and it is used to automate the builds.
- Follow **SOLID Design Principles** for achieving better design.
- Work with several **GoF Design Patterns** like Factory, Builder, Command, Facade, Singleton in order to achieve clean separation, better management of dependencies.
- Develop test apps to demo the capabilities that are created using pure **HTML, JavaScript**.
- **Use XML** is the major format used to store configurations.
- Maintain server-side using **SOAP binding** based services.
- Use **WCF** is used to expose the services.
- **Use Asynchronous messaging** with the help of **WCF** and is keep this as infrastructure concern.
- Maintain API to interact with the messaging system as **ActiveX** control which can be hosted inside web pages.
- Develop test apps using JavaScript, HTML5, CSS & AngularJS

Environment: Solid Design Principles, GoF design patterns, Visual studio 2015, Windows 10, C# 5.0, .Net 4.5, WPF, WCF, SOAP Web Services, Linq, TFS. HTML, Javascript, XML, ActiveX & WinForms.

Orion Systems Integrators Inc., Woodcliff Lake, NJ

Jul 2009 – May 2016

Application Architect

Project - eAudIT (Jul 2009 - May 2016)**Client - KPMG****Role - Application Architect**

This is a fully-fledged auditing solution for a reputed client of Orion Inc. It uses WPF as well as AngularJS for desktop client and web client respectively, WCF for communication and SQL Server as database. The main highlight of this application is the ability to customize the screens and application logic by business analysts without the intervention of developers. The codebase is set up in such a way that the same code can be compiled for WPF and Silverlight which reduces the maintenance overhead. Silverlight client is now retired and replaced by Angular JS based web client. Distributed computing is used in this system to scale the processing requirements.

Responsibilities

- Working with product owners to decide the features, identify non-functional requirements and translate it to architectural specifications.
- Preparing architectural design documents using the C4 architecture documenting convention.
- Designed component and microservice interactions and defined SOA boundaries.
- Helped the development team to do cash management.
- Designing the services which use Net pipe, NET TCP, ReST & SOAP bindings.
- Transferring the high-level architecture to offshore architect for preparing low-level design
- Ensuring the code is always aligned with architecture also 3rd level code review.
- Done research on hosting audit applications to the Microsoft Azure cloud platform.
- Conducting Proof of Concept efforts before adopting any new technology or technology upgrade. Azure platform migration using Azure ServiceFabric, WebJobs are few to name.
- Coding core framework in **TypeScript & C#**
- Worked with Razor, Action Filters, Authentication, Routing, Html helper.
- Created modularized code in Javascript by creating **library files** for various purposes like Ajax, error handling and so on.
- Used several patterns like **pub sub**, **promises** and **deferred** in Javascript.
- Worked with **TypeScript** that provides type safety to **Javascript**.
- Evaluated new **Javascript** libraries for use in a new project like **Angular JS**, **Coffee Script**.
- Architected Data Access Layer for the multi-tenant database.
- Worked on **SSRS** and evaluated a number of other reporting tools in the market for developing a Reporting solution.
- Designed custom Reporting solution to retrieve data based on user-selected fields and filters. The Reporting solution was developed following **SOLID principles** and worked with complex data stored in the **Entity Attribute Value** format. ActiveReports and SSRS used as report viewer and it would also allow **exporting** the data to Excel, pdf and other formats.
- Worked on **SSIS** to develop **ETL packages** for importing data from old versions to new versions.

Environment: JavaScript, TypeScript, AngularJS, Bootstrap, .NET 4.0, .NET 4.5, .NET 4.6, C# 5.0, WCF, LINQ, SQL Server 2008 & 2012, SSIS, SSRS, Visual Studio 2015, WPF, Telerik WPF controls.

Project - Data warehousing & mining (May 2015 – Dec 2015)**Client - KPMG****Role - Application Architect**

This is an audit data warehousing and mining application for a leading audit firm that Orion Inc is serving. It collects data from audits happened in the past as well as ongoing in a periodic fashion and keep in the warehouse for future analysis and reporting purpose. Since the data collected has sensitive and personally identifiable information, it is scrubbed before warehousing. It has all the operations of normal data warehousing such as loading data into staging, cleaning the data, moving to the warehouse and preparing cubes that are fast to play around with. It uses SQL Server as storage, SSIS and .Net in its processing pipeline

Responsibilities

- Re-Architect the existing data warehouse solution after defining the product features and defining the non-functional requirements.
- Decouple the system using **asynchronous** messaging and keep the messaging as infrastructure concern..
- Define the **Service contracts in WCF**, a major component in SOA, which would act as an interface to the data warehouse.
- Identify the low performing components of the system and improve the speed.
- Ensured pluggable architecture, by following **SOLID Design principles**.
- Review the web-based interface to ensure its meeting industry standards.
- Lead the efforts to implement **TDD**. Used **Moq** as the Mocking framework.
- Review the application and suggest the places where **Asp.net AJAX** is applicable to increase performance.

Environment: Asp.Net, .NET .NET 4.0, C# 4.0, AJAX, Telerik Controls, JQuery, WCF, LINQ, SQL Server 2008,SSRS, SSIS, SSAS, Visual Studio 2015.

Project - Audit Platform (Oct 2014 - Aug 2015)

Client - KPMG

Role - Application Architect

This is a highly scalable distributed computing server platform for one of the Orion Inc's reputed client to host audit applications. The primary duty of this platform is to manage the web, processing and database servers in the server environment. The platform is capable of centrally holding audit information from other audit applications. It provides queueing system, scheduling mechanism, notification services and interconnection points for all the audit applications hosted on it. The platform publishes APIs for other audit applications to interact with the platform as well as to each other. The APIs are backed by WCF services. A Management Console built using ASP.Net MVC acts as a console for managing the audit platform.

Responsibilities:

- Architect an enterprise-wide software deployment platform for auditing applications by analyzing existing applications and their deployment model.
- Designed Microservice management portal and decided SOA boundaries.
- Helped development team to do cash management.
- Bring unified practice to address cross-cutting concerns such as **messaging**, logging, etc...
- Architect multi-tenant database model for ensuring security but at the same time reducing the cost.
- Architect web-based management console to administer the environment using **Asp.net MVC 4, jQuery, Telerik Controls and WCF** to provide web 2.0 experiences to end-user.
- Architected the support tools needed for production support teams.
- Done research in Microsoft Azure cloud platform for feasibility to host in it.
- Done Proof of Concept applications to host platform in Azure using ServiceFabric, WebJobs, etc...

- Making sure the management console is generic and has capabilities to applications to host their own plugins.
- Ensuring the management console platform is meeting the industry standards..
- Making sure the platform code is aligned with the architecture.
- Coding critical components of the system in **C#** as well as **JavaScript**
- Improved performance of the Search, by upgrading to newer version of Search Engine, load balancing the incoming search requests.
- Did research for client-side libraries and decided to use **jQuery & Telerik controls**.
- Working closely with the business to resolve a number of critical maintenance tasks, and taking ownership to solve them independently.
- Helping the development team to author a number of critical deployment documents, clearly listing down instructions and rollback plans for IT Team.
- Researching the cloud technologies and feasibility to bring the audit platform to the cloud. The options include **ServiceFabric, WebJobs, Web and Worker Role, Azure Table, Queue, Blobs**, etc...

Environment: .NET 4.5, C# 5.0, ASP.NET MVC 4, Visual Studio 2013, Telerik Controls, JQuery, JavaScript, WCF, LINQ, Entity Framework, Messaging, OData, SQL Server 2008, Azure, ServiceFabric, Distributed computing.

Project - OPL Mobile App(Mar 2012 - Apr 2012)

Client - Orion Internal

Role - Application Architect

Orion Premier League mobile application delivers the real-time status about the recreational activities conducted by Orion to its employees. It also has a web-based thin client where people can get more details along with socialization. This is an internal application mainly targeted for learning purpose.

Responsibilities:

- Architect a simple Android mobile & web application for viewing internal company events with data entry and real-time updates.
- Design the database and write basic queries.
- Coding the Android application in Java & Web App using HTML5 & jQuery.
- Coding and unit testing the WCF services using **Azure Web Roles**.
- Socialize the application among the co-workers.
- Host and maintain the WCF services using **Azure Web Role**.

Environment: Android, Java, .NET 4.5, C#, ASP.NET MVC 4, JQuery, JavaScript, WCF, LINQ, Entity Framework, SQL Server 2008, Azure, Worker Role, Web Role.

Project - ShopBeNimble(Nov 2011 - Apr 2012)

Client - Orion Internal

Role - Application Architect

A mobile application backed by Windows Azure services which bring the day to day grocery shopping offers to handheld devices. This helps us to keep track of the grocery needs and makes the shopping smarter by identifying the user by their facebook, google or live ids.

Responsibilities:

- Interacted with client & partners to understand and shape the vision of the product.
- Architected scalable shopping helper application for mobile clients.
- Optimized the application architecture for **Microsoft Azure** services such as Web Role & Worker Role.
- Enforced the security of the application via federated authentication.
- Coded the cloud platform-independent caching engine.
- Coded core Android & WCF service components.
- Helped the development team to host and maintain the WCF services using **Azure Web Role**.
- Designed text search feature using Lucene.Net

Environment: Android, IOS, Java, .NET 4.0, C#, ASP.NET MVC 3, JQuery, JavaScript, WCF, LINQ, Entity Framework, SQL Server 2008, Azure, Worker Role, Web Role & Lucene.Net

Identitymine, Kochi, India
Sr. Software Engineer

Nov 2007 – May 2009

Project - Surface bridge game (Mar2009 May 2009)

Client - Identitymine internal

Role - Sr. Software engineer

This is a Microsoft surface implementation of the famous card game Contract Bridge. This is aimed at casinos. This card game is multi-touch enabled like other surface application. It allows 4 players to play around the table. It stores each player information as well as details about the games they played.

Responsibilities:

- Understanding requirements on what needed in the demo and preparing the demo plan.
- Developing the custom controls required for the **WPF** based **Microsoft Surface** UI.
- Developed the game engine which has the core algorithm using **C# .Net**.
- Designed the **API** for the game engine to the UI.
- Used **Linq** to make the code readable
- Unit testing the game engine.
- Developing the game UI using **MVVM** architecture in **WPF**.
- Designed the database structure to keep the credentials and game points
- Developed stored procedures to access the game database.
- Designed web services using WCF to expose server-side functionalities.
- Participated in peer to peer code reviews
- Prepared the MSI packaging using NSIS tools

Environment: .NET 3.5, Custom API, MVVM, Microsoft Surface, C#, LINQ, SQL Server 2005, WPF,XAML,WCF Expression Blend.

Project - Client Preview Site (Oct 2008 – Mar 2009)

Client - Identitymine Internal

Role - Sr Software Engineer

This is a Silverlight project for Identitymine to showcase their design assets to the clients. So that clients will get an idea of how their applications will look like when delivered. This site can also contain documents,

audios, and videos to demonstrate the application flows and behavior. Clients are entertained to give their feedback on each mock-up screen and videos to improve the design. This site is responsible to show the design skills of Identitymine to the clients by its own look and feel since Identitymine is mainly focusing on improving user experience.

Responsibilities:

- Understand the requirements and high-level design.
- Brainstorm about low level implementation details.
- Code the application using **C# .Net**.
- Unit test the application.
- Develop custom controls required for user interface.
- Write **JavaScript** to mitigate and shortcoming of **Silverlight**.
- Develop required services in **WCF**.
- Technology upgrades to the latest Silverlight versions.

Environment: Silverlight, C#, .Net 3.5, WCF, JavaScript, Windows Server 2003, Windows XP, Windows 7

Project: Crossfader(Dec 2007 - Aug 2008)

Client - Microsoft

Role - Sr. Software Engineer

Crossfader 2.0 is a completely new site in Silverlight which built upon the concepts of the existing community site enabling musicians to expose their work. This is an ongoing project for Microsoft and in future, this will replace the existing www.crossfader.com

Responsibilities:

- Understand the high-level design.
- Develop the application using **C#** in modular fashion.
- Develop and unit test **Silverlight** custom controls required.
- Define the **WCF** service contracts for data retrieval.
- Write **JavaScript** to mitigate and shortcoming of **Silverlight**.
- Help the designers to apply the layout using **Expression Blend**

Environment: C#, Silverlight 2.0, JavaScript, WCF, Expression Blend.

Project - Blendables Essential Mix (Apr 2007 - May 2009)

Client - Identitymine Internal

Role - Sr. Software Engineer

Blendables is an amazing product from Identitymine which is a WPF library that includes tools and components for developers. I am working in its various levels of engineering such as development, testing, documentation, etc....

Responsibilities:

- Analyze the requirements from customers and align the features and bugs.
- Develop new features as and when required using **C# .Net**.

- Upgrade the controls using **WPF** new features.
- Support the library by means of mails and forums.
- Develop test and demo apps.
- Make sure the controls are compatible with **Expression Blend** tool.
- Unit test the components and controls in the library.
- Do the changes in the installer when necessary.

Environment: C#, .Net 3.5, WPF, Expression Blend

Syncfusion Software, Chennai ,India
Software Engineer Level 4

Nov 2005 – Apr 2007

Project - Syncfusion essentials tools for WPF & Winforms

Client - Syncfusion Product

Role - Software Engineer

Syncfusion WPF controls package helps developers to give good look and feel to their .net 3.0 applications. It came to role, if the standard windows controls are insufficient to implement the requirement. This suite of professionally designed custom controls and components also extends to WinForms to enhance applications both functionality-wise and look wise.

Responsibilities:

- Do the developer support of the **WPF** and **WinForms** controls via forums, emails, incident tracking system and occasionally via phone.
- Develop the demos for the custom controls in both **C# & VB.Net** using **all .Net frameworks** available.
- Align the new features and defects in priority for development.
- Test the controls before every release.
- Automate the testing of controls using **QTP**

Environment: .Net 1.0,1.1, 2.0 & 3.0 ,C#, VB.Net, WPF, WinForms, QTP