

# RUPESH TIWARI

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## PROFILE SUMMARY

Highly organized, dedicated, and analytical professional, with more than 16 years of extensive leadership experience in developing Microsoft Web applications using Microsoft frameworks. Excellent work exposure in Software Architecture, Design and Development in Fixed Income trading platform, Equities trading platform in Global Capital Market, Derivative Trading system, Trade Processing, Managed Solution Group and Private Wealth Management systems in Financial Services space during my assignments with Merrill Lynch, Bank Of America. Skilled at directing all facets of project life cycle, from initial analysis and conceptual design to implementation, quality review, and enhancement; eventually optimizing operational efficiencies and improving business processes. Adept at accomplishing simultaneous, large-scale projects within budget and time constraints, complemented with the ability to lead, coordinate, and train cross-functional teams to provide and execute innovative technical solutions. Excellent project life cycle experience (SDLC) in all aspects of requirements specifications, design, code, test, deploy, maintaining. Experienced in working on Test Plans, Functional Specifications, Use cases, User Acceptance Testing (UAT), Involved in performing the FIT Analysis, Stress testing. A team player with concern for quality at all levels and ability to perform under stress. Good communication and interpersonal skills, commitment, dedication, result oriented, hard working with a quest and zeal to learn new technologies and undertake challenging tasks.

## PROFESSIONAL SKILLS

- |                                |                                 |                                      |
|--------------------------------|---------------------------------|--------------------------------------|
| • Pluralsight Author & Trainer | • Database                      | • Domain Driven Design               |
| • Project Management           | • IDE                           | • Operating systems                  |
| • Process Improvement          | • Framework                     | • Design Patterns                    |
| • Programming Languages        | • Scripting and markup          | • System Design                      |
| • Microsoft Technologies       | • Methodology (UML, Clean Code) | • Effectively handling sensitive     |
| • Web Technologies             | • Azure Cloud Implementation    | • Confidential issues                |
| • Source Control Systems       | • TDD & BDD                     | • Complete deadline-sensitive        |
| • Web/App Server               | • Service Oriented Architecture | • Leadership, and Team Collaboration |

## CORE COMPETENCIES

- Equipped with proven adeptness in providing astute leadership in establishing and maintaining strict compliance with company regulations.
- Ability to multitask in a fiercely competitive and fast-paced environment, without compromising quality and timely completion of projects.
- Able to engage closely with the development team to determine the best technical implementation methods for a product feature, as well as a reasonable execution schedule.
- Equipped with thorough knowledge of advanced IT principles, methods, standards, and practices.
- Flexible and creative orientation comfortable with early-stage, start-up organizational environments.
- Strong interpersonal skills and ability to work with cross-functional teams.

## PROFESSIONAL EXPERIENCES

### Strasz Assessment Systems

Jan. 2014 – Present

#### Senior Software Architect (Jan. 2019 – Present)

#### Senior Web Application Developer, (Jan. 2014 – Dec. 2018)

- Lead, Mentor and Participate in Scrum Team that Builds, Cross team collaboration and communication, Maintains and Enhances the AICPA Exam Assembly and Delivery Systems.
- Lead milestone and sprint level design modeling sessions. This encourages good design and coding practices that have a long and short term scope.
- Pair Program, Mentor and Collaborate with team members. Provides learning and teaching opportunities and broad team knowledge. Provide point estimates to assist the business in defining EPICS and Product Backlog Items.
- Involved 50% in design day to day basis by participating in system design and architecture oversight meetings to solve design problems following Service Oriented Architecture, Domain Driven Design and Clean Code practice.
- Created JS library for async messaging & UI composition libraries for client side microservices architecture.
- Moving on-premises workloads to Azure Cloud for Microservices, Serverless, Security/Monitoring, Search and Analytics.
- Involved 50% day to day basis coding with Technologies, Frameworks and Languages: Angular, Redux, NgRx, NodeJS, Jasmine, C#, ASP.Net MVC, ASP.Net Web API, TFS, Unity IoC Container, RhinoMocks, Resharper, Entity Framework, SQL Server, JSON, XML, RabbitMQ, MassTransit, N-Service Bus, RavenDB.

**Development Practices and Methodologies: Domain Driven Design, Service Oriented Architecture, Test and Behavior Driven Development, Agile, SOLID.**

**FUJIFILM Medical Systems USA, Inc.**

**Apr. 2011 – Jan. 2014**

**Sr. .Net developer/Technical Lead**

**Project Description: Web Advanced Reporting System**

Reporting re-architecture project intended to add the ability to do Cath reporting and Peripheral Vascular (PV) reporting to the current Synapse CV system. The approach is to develop the new reporting capabilities using the same architecture and design approach we intend to use for reporting when we eventually implement a full Everest system. The reason for this approach is to begin doing as much new development as possible using the new Everest architecture while minimizing the investment we continue to make in the legacy architecture.

**Responsibilities:**

- Actively participated in High-level Document and Detailed level Document for different modules in the project.
- Developed application using MVC architecture with .NET framework 4.5 and MVC 3 using RAZOR view engine.
- Created Technical Approach Document (TAD) by understanding the Business Requirement Document. Created System Architecture Document (SAD), Identified the Core business objects and Entities.
- Worked on web-based application using C#, Visual Studio 2012, WCF, Silver Light and .Net 4.5 Framework, created Service Oriented Architecture.
- Implemented Object Oriented JavaScript, JQuery, Google Closure and Design Patterns.
- Implemented Code first approach to create loosely coupled architecture used Entity Framework and Dependency Injection. Created various Utilities that are being used across the projects.
- Used Run Code Analysis and FXCOP to make the code standard and error free.
- Deployed code in QA / Prod servers using Internal Turn process. Involved in UAT defect fixing. Attending and fixing production issues.
- Coordinated with the Offshore Team and got work done from them. Provided training for the junior developers.
- Using the Team Foundation Server version control tool for project management.
- Created stored procedure queries and data structure using SQL 2008.

**Environment / Tools: ASP.Net, IIS, Windows XP, Visual Studio 2012, .Net framework 4.5, C# 4.0, Entity Framework, Web, WCF, MVVM, WPF, Silverlight, , JavaScript, Design Patterns, , JQuery, Linq, Lambda Expressions, Agile Scrum, IOC using Spring.Net, HTML, Google Closure library.**

**Humana**

**Mar. 2011 – Apr. 2012**

**Sr. .Net developer/Technical Lead**

**Project Description: Web Authorization Management (WAM)**

Humana.com supports Authorization submission for inpatient / outpatient and referral cases. Providers create Authorization by submitting the claims for the patient. Providers can update the Authorizations based on the Date of discharge or procedure codes and International Classification of Diseases (ICD-9 /ICD-10) codes. It maintains more than millions of account updates and submissions.

**Responsibilities:**

- Actively participated in High-level Document and Detailed level Document for different modules in the project.
- Used HIPAA transaction rules with ICD 5010 to create the WCF Services that provided for Authorization updates / submission to Humana Availability.
- Maintaining Humana Member Portal/ Provider Portal and working on Humana Vitality. Created Prototype and POC on Authorization Inquiry using HIPAA 5010.
- Implemented Staggered Implementation by loading multiple user controls dynamically based on the context. Worked with Knockout.js JavaScript client library to work MVVM pattern in asp.net web application.
- Designed and developed product catalogue application using VS 2010, Silverlight and MVVM pattern.
- Created Technical Approach Document (TAD) by understanding the Business Requirement Document. Created System Architecture Document (SAD), Identified the Core business objects and Entities.
- Designed and Created SSIS package using MS-SQL 2008 and SQL Developer to get the Humana Health Assessment member data and Ftp'd it to the Rule Engine.
- Worked on web-based applications using Visual Studio 2010, and WCF in .Net 4.0 Framework, created Service Oriented Architecture.
- Implemented Spring.Net to create loosely coupled architecture and Dependency Injection. Created various Utilities that are being used across the projects.
- Used Run Code Analysis to make the code standard and error free.
- Deployed code in QA / Prod servers using Internal Turn process. Involved in UAT defect fixing. Attending and fixing production issues.
- Coordinated with the Offshore Team and got work done from them. Provided training for the junior developers.
- Using the Team Foundation Server version control tool for project management.

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- Creating indexes on tables and Optimizing Stored procedure queries.

**Environment / Tools:** Visual Studio 2010, .Net framework 4.0, C# 4.0, Web, WCF, MVVM, WPF, Silverlight, ASP.Net, IIS, JavaScript, Design Patterns, Windows XP, JQuery, knockout, Linq, Lambda Expressions, Agile Scrum, IOC using Spring.Net, HTML, HIPAA 5010

**Bank of America-Merrill Lynch**

**Oct. 2010 – Mar. 2011**

**Sr. .Net developer/Team Leader**

**Project Description: Integrated Business System (IBS)**

This is a single application where Billing related things happen for all of the Managed products in Merrill Lynch. It is built to create the single experience for entire products to cater the billing related data. It was targeted to almost 8 different products managed by Merrill Lynch Bank of America. Application calculates fees based on the different fee types like Co-Trustee, their discount and different types of fee calculation formulae.

**Responsibilities:**

- Involved in creating Technical Approach Document by understanding the Business Requirement Document. Created System Architecture Document, Identified the Core business objects and Entities.
- Specified the system architecture and design utilizing the UML Analysis and Design Models.
- Developed a web-based application for a global client using Visual Studio 2010, MVC, and WCF in .Net 4.0 Framework, created Service Oriented Architecture.
- Created HTML Helper for jqGrid in MVC Framework, created many jQuery plugins. Implemented C# 4.0 Features used Extension Methods and implemented DLR.
- Created Proof of concept using WPF and Silverlight separately.
- As being part of the Agile Scrum Team worked on Test Driven application. Made Unit test application followed Inversion of Control pattern, implemented Dependency Injection using Microsoft Unity Application Block.
- Created overall Domain Driven Design, Implemented Repository Pattern and used NUnit & Rhino Mock for testing.
- Using the Team Foundation Server version control tool for project management.

**Environment / Tools:** Visual Studio 2010, .Net framework 4.0, C# 4.0, Web, WCF, MVVM, WPF, Silverlight, ASP.Net, IIS, JavaScript, Design Patterns, Windows XP, jQuery, Linq, Lambda Expressions, Agile Scrum, IOC using Spring.Net, HTML

**Bank of America-Merrill Lynch**

**Jan. 2010 – Oct. 2010**

**Sr. .Net developer/Team Leader**

**Project Description: Discretionary Manager (DM) Portal**

This is a highly important and critical web application portal used by Merrill Lynch internal portfolio managers. DM Portal allows more than 1000+ Discretionary Managers (DM) to search requests assigned to them for reviewing portfolios, funds, securities based on their current market values and investors risk appetite.

**Responsibilities:**

- Developed a web-based application for a global client using .Net 3.5 Framework with WCF service that provided over 10,000 Managers, home managers and discretionary managers, the ability to plan, analyze and approve client's requests selling purchasing securities with dynamic visibility into the individual securities current market value and clients budgets.
- Specified the system architecture and design utilizing the UML Analysis and Design Models.
- Created Custom Control Multiple Select Dropdown list using C#, .Net Framework, LINQ, Lambda Expression, WCF and jQuery instead of using List Box. Achieved better performance and saved more than 50% real estate of user interface.
- Re-factored application using Object-Oriented methodology and improved performance from 3000 records within 60 seconds to 4000 records within less than 3 seconds.
- Presented recommended solutions to Business managers and staff to ensure that they are aware of and support these changes. Actively participate in code and design reviews and propose process improvements.
- I was responsible to create and maintain the Winforms Batch job to create the Contribution and Withdrawal Request in Trading System using C# Asp.Net Winform Application and LINQ.
- Coordinating and managing offshore team, reporting directly to Client.
- Using the Team Foundation Server version control tool for project management.
- Involved in Integration testing of the application. Created Deployment package using MS .Net.

**Environment / Tools:** Visual Studio 2008, .Net framework 3.5, C#.Net, Web/ Winforms, WCF, ASP.Net, IIS, Web User Controls, JavaScript, Win 2003/XP, jQuery, jQuery UI, jQuery CSS Framework, Linq, Lambda Expressions, Agile Scrum.

**Bank of America-Merrill Lynch**

**Feb. 2009 – Dec. 2009**

**Sr. .Net developer/Team Leader**

**Project Description: Mass Action**

Bulk Approval of enrollment and account maintenance requests is being achieved by this web application in Merrill Lynch. Investment Manager can do Boolean search based on criterions, select n- number of accounts and can perform any desired

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action like Check out, Check In, Approve, and Reject etc. based on the checklist. This helps Investment Managers to maintain the portfolio of clients by selling and keeping their securities and assets.

### Responsibilities:

- Developed an application system with reusable components to search client requests using Boolean search criteria and survey results allowing consumers to register for product samples and for the client to establish market share data using LINQ and Lambda Expressions.
- Proposed and implemented alternative solutions to original business requirements that led to reduction in project effort and schedule thus saving the client \$24,000 in costs.
- Helped Onsite Coordinator by involving in all stages of application development life cycle (SDLC) including requirements, logical and physical architecture modeling, design, development, implementation and support.
- Lead the architecture for exposing the skills by implementing design patterns like Template pattern, Façade pattern and Observer patterns and achieved most efficient solutions for the business requirement using C#, .Net Framework and WCF.
- In charge of the Learning and Development department for a team of 50 people. Responsible for team growth including training. Supervised 4 developers at my team. Conducted sessions on jQuery, jQuery UI, Design Patterns, Advance JavaScript, and CSS Sprite Technique, .Net Framework and Object Oriented Principles. Ensured that coding standards and processes were met. Scheduled regular “technical - sessions” to disseminate information and provide examples of best practices.
- Created and maintained C#, Asp.Net Win form, application to migrate the old Xml to new Xml format while converting US Trust accounts to Managed Solution Group Accounts.

**Environment / Tools:** Visual Studio 2008, .Net framework 3.5, C# ASP.Net.Net, Web, Win form, WCF, , Ajax Toolkit, IIS, Web User Controls, JavaScript, Win 2003/XP, jQuery, jQuery UI.

**Bank of America-Merrill Lynch**

**Jan. 2008 – Feb. 2009**

**Sr. .Net developer**

### Project Description: Managed Accounts Advisor (MAA) Dashboard

Managed Account Dashboard is used by Managed Accounts Advisors to carry out workflow activities of an Account life cycle. The application is used to carry out functional activities on a workflow of an Account life cycle activity.

### Responsibilities:

- Leading a team of developers and carrying out code review of other developers. Providing help and support to them and analyzing their work.
- Developed front-end screens used ASP.NET web forms, web user controls, Master Pages, Ajax, Themes and caching features. Implemented client business rules, and coded application logic in ASP.NET. Net utilizing the power of C#, .NET Framework.
- Developed scalable asynchronous application using Asp.Net Framework, jQuery Ajax Framework, jQuery UI CSS Framework and jqGrid. Used JavaScript and Asp.Net validator controls for client side and server side validations.
- Implemented Object Oriented JavaScript programming using prototypal inheritance. Implemented jQuery Ajax to consume WCF services. Achieved client side functionality to call server side methods. Wrote user defined functions, stored procedures and views using SQL Server 2005.
- Designed and implementation of user interface (GUI), middleware business components, system integration and deployment of the application.
- Generated standard guidelines and lessons learned documents for company knowledge management database to preserve valuable experience gained from program acquisition phase to production launch.

**Environment / Tools:** Visual Studio 2005, .Net framework 2.0, C#.Net, ASP.Net, Ajax Toolkit, IIS, Web User Controls, JavaScript, Win 2003/XP, jQuery, WCF

**Audatex North America, Inc**

**Jan. 2007 – Dec. 2007**

**Sr. .Net developer**

### Project Description: Audatex Rule Engine and Rule Manager

This application is the value added functionality to the existing business application (ADXE) which will automate the review process to validate created estimates of damaged vehicles in road accidents. There are several rules created by Rule Manager and Rule Engine will process those rules against the input estimates. Rule engine will create resultant xml and store them into a database for future references.

### Responsibilities:

- Analyzed and created MS FXCop customized framework for validation of more than 10,000 lines of Code with various custom validation rules.
- Architected and developed web application, created front-end screens and coded application logic in ASP.NET, C#. Net utilizing Microsoft .NET Framework. Implemented ASP.NET state management, ASP.NET caching features, securing ASP.NET web application and win forms.

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- Developed and consumed Asp.Net Web Service and WCF Service from client side (JavaScript) using XmlHttpRequest call. Implemented Builder and Decorator design pattern in order to separate the construction of a complex object from its representation.
- Created .Net custom component using JavaScript and C# that enabled users to create Boolean expressions quickly and allowed them to evaluate Boolean expressions on the client side by JavaScript modular pattern. Component is extensively used in various similar web applications. Created shared C# libraries as reusable components used across the projects.
- Mentored 3 developers and worked with them to ensure task completion and solved problems.
- Extensively used Visual Source Safe for code management and maintaining consistency among the network. Wrote and tested unit test cases for Quality assurance.
- Wrote user defined functions, stored procedures and views using SQL Server 2005.

**Environment / Tools: MS Visual Studio 2005, MS SQL 2005, Web Services, JavaScript, MS FXCop, WCF, NANT, NUNIT**

**Cardinal Health, Inc.**

**Mar. 2006 – Jan. 2007**

**Sr. .Net developer**

**Project Description: CTS BONES**

This application was used to automate the business behind healthcare. Cardinal Health helps pharmacies, hospitals and ambulatory care sites focus on patient care while reducing costs, improving efficiency and quality, and increasing profitability.

**Responsibilities:**

- Working with an onsite coordinator understood the business requirement and helped him to create the high level requirement document. Created Sequence Diagram and class diagram using UML Visio 2003. Authored technical documents like BRS and SRS based on the business and system requirements.
- Analyzed, designed and programmed object-oriented client-server web application. Developed and coded 3 tier applications. Implemented Design Patterns like Factory pattern and Builder Pattern to develop the application in order to implement the Object Oriented Open/closed principle.
- Architected and developed core Business models, business rules and Data Access Layer in C#, .Net Framework. Created Web Service and consumed it from user interface. Designed and built reusable C# logger Library supporting error, exception, and status loggers. Wrote Unit Tests using Nunit and helped testers to prepare test cases. Deployed the .Net code in the Test Environment.
- Worked on Deployment phase to migrate the code binaries to QA and Production Environments. Worked on SIT phase resolved defects and resolved production issues and break fixes.
- Developed a Microsoft window's based application to export/import the data from one SQL database to other database also created it's installer for deployment using C# windows programming and SQL 2005. Wrote user defined functions, stored procedures and views using SQL Server 2005.
- Wrote and tested unit test cases for Quality assurance. Extensively used Visual Source Safe for code management and maintaining consistency among the network.

**Environment / Tools: MS Visual Studio 2005, MS SQL 2005, Web Services, JavaScript, MS FXCop, WCF, NANT, NUNIT**

**Microsoft India**

**Jul. 2005 – Feb. 2006**

**Sr. .Net developer**

**Project Description: RFID Enabled Library Management System**

This application provides a complete solution for Library Management System using RFID technology. Library Management System software involves the processes like, Tagging Books Check In/ Check Out Security Management Inventory Control.

**Responsibilities:**

- Participated in the Business Requirement phase. Worked extensively in implementing the requirements and reaching the goal on time.
- Helped Senior Manager to complete Business Requirement Documents (BRS) and System Requirement Document (SRS).
- Authored UML diagrams (Sequence, Class Diagrams) and documents to specify the design.
- Developed front-end screens and coded application with implementation of Master pages, User Controls. Created 3-Tier loosely coupled architecture by implementing C# Interfaces, JavaScript and Ajax.
- Architected and wrote Business Objects using C#, Asp.Net, created Asp.Net Web Services, wrote Abstract Data Access Layer using C#. Implemented Singleton Pattern in order to make a unique object for the user for doing check in checkout of Books, Abstract Factory Pattern, and Observer Pattern to develop the application.
- Involved in tagging books with RFID antennas, and stored its corresponding values in the database to create the repository. Created Web Service to get tagging info from Database.
- Wrote user defined functions, stored procedures and views using SQL Server 2005.
- Reviewed developed code using Microsoft FXCop Tool. Made reports using Crystal Reports.
- Wrote and tested unit test cases for Quality assurance. Extensively used Visual Source Safe for code management and maintaining consistency among the network.
- Created Stored Procedures and Tables.

**Environment/Tools: MS Visual Studio 2005, MS SQL 2005, Web Services, JavaScript, MS FXCop, WCF, NANT, NUNIT, UML**

## EDUCATION AND PERSONAL DEVELOPMENT

Bachelor of engineering in Electronics and Telecommunication, India.

MCTS certified in (Microsoft .Net Framework) Developing Distributed Applications with Microsoft Visual C#. NET.

Certification on NCFM NSE's Certification in Financial Markets.

## MY WORKS

- Authored a Pluralsight course "**Unit Testing RxJS with Marble Diagrams**" (<https://app.pluralsight.com/library/courses/unit-testing-rxjs-marble-diagrams>)
- Founder of Full Stack Master YouTube Channel (<https://www.youtube.com/fullstackmaster>)
- Full stack software development Trainer. I trained 100's of professional developers so far
- Write once a week .Net, Angular or MEAN stack related articles (<https://rupesthiwari.com/posts>)
- Authored to NgRX library at GitHub open source ( <https://github.com/ngrx/platform>)
- Created UI Composition with microservices design prototype using NgRx & Redux (<https://github.com/rupesthiwari/e-store>)
- Created Highly scalable Angular e-Commerce application deployed to cloud (<https://github.com/rupesthiwari/Online-Shop-eCommerce-App-Angular-MongoDb-Heroku>) Website to the app live: <https://online-shop-ecommerce.herokuapp.com/products>.
- Created Node package to implement pub/sub framework on Angular application (<https://www.npmjs.com/package/@fsm/angular-pubsub> )

## Social Media Links

- Website  
<https://rupesthiwari.com>
- LinkedIn  
<https://linkedin.com/in/rupeh-tiwari/>
- GitHub  
<http://github.com/rupesthiwari>
- Facebook  
<https://www.facebook.com/fullstackmaster1>
- Medium  
<https://medium.com/@rupeh-tiwari>
- Twitter  
[http://twitter.com/rupesthiwari\\_co](http://twitter.com/rupesthiwari_co)
- YouTube  
<https://www.youtube.com/fullstackmaster>
- Instagram  
<https://www.instagram.com/rupesthiwari.co/>
- Pinterest  
[https://www.pinterest.com/rupesthiwari\\_co/](https://www.pinterest.com/rupesthiwari_co/)