

# Kishore Shiraguppi

*Full-stack .NET & Frontend Engineer. M.S. Degree in Software Systems.*

**Senior Technology professional** with over **18 years** of progressive hands-on IT experience in enterprise web & distributed client server technologies serving business domains like Banking, Finance, Wealth Management, Municipal Markets, Fixed Income, Logistics, Insurance, Enterprise Frameworks, Manufacturing & Construction.

## Professional Skills

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**Lead** the team, manage & contribute to **architectures, requirements analysis, design, development, testing & maintenance** of various enterprise-level LOB applications & framework solutions.

Hands-on experience in application development using **frontend web & server-side** technologies like **C#, ASP.NET, MVC, Razor pages, Forms, RESTful Web APIs, HTML, CSS, JavaScript, jQuery, Handlebars, Angular, React, SPA, .NET Framework, ADO.Net, Entity Framework, WCF, Web Services, JSON, AJAX, XML, LINQ, Node, Express, Object Oriented Methodologies (OOAD), SOA, Microservices, MVVM, Design Patterns, Data Modeling, UML** based system design, development & performance optimizations.

Strong experience in **Database Design** & development with **Stored Procedures, Functions, Triggers** using **SQL Server 2016/2012/2008, Oracle 10g, & DB2**. Working knowledge of **NoSQL** databases like MongoDB, Cassandra, Redis.

Extensive experience in developing **client/server** applications using **Web, WinForms, WPF, XAML, Electron, Silverlight**.

Strong experience with dev, **devops** & design tools such as **Visual Studio 2022, 2019, 2017, VSCode, NUnit, NPM, Node, Git, GitHub, Bitbucket, Visio, Invision, MS Office, SCRUM/Agile practices, Test Driven Development**, testing, bug fixing & security frameworks, automated builds, **SAST** scans, **CICD**, **Jenkins pipeline**, **JIRA** etc.

Adept in data analysis & implementation of **business intelligence** packages using **SQL Server Integration Services (SSIS)** packages. Experience on reporting tools like **Crystal Reports** and **SQL Server Reporting Services (SSRS)**.

Experience in **research, UI/UX, documentation**, end-to-end **SDLC** flows, **Configurations & Project Management**.

Experience in **team leadership & management**, strong analytical, **problem solving** skills, **attention to details**, **interpersonal** skills, good **team player**, **mentor**, & also a **quick learner**, **quick-to-learn** & adapt newer technologies, strong oral and written **communication skills**.

## Technical Skills

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**Frameworks:** .NET Framework 4.7/4.6/4.5/4.0/3.5/2.0/1.x .NET Core 2.2/3.1/6

**Microsoft Technologies:** C#, VB.NET, ASP.NET 4.5/3.5/2.0/1.x and MVC 3.0/4.0/5.0, .NET core 3.0 & 6, AJAX, Silverlight 5.0/4.0/3.0, XAML, WPF, ADO.NET, Crystal reports, SSIS, SSRS, WCF, Web Parts, Web Services, WSDL, XSL, LINQ, n-Hibernate, Entity Framework 4.3/5.0/6.0, XAML,

**Operating Systems:** Microsoft Windows Server 2k16, 2k12 & other previous versions.

**Frontend Technologies:** HTML, CSS, JavaScript, jQuery, Ajax, Angular, React, Web forms, MVC razor pages, WinForms.

**Middleware/App Servers:** Microsoft .NET, Restful Web APIs, Web-Services, WCF Services, MuleSoft Microservices, Remoting, ADO.NET, XML, DTD, XSD, XSLT, WSDL, Entity Framework, LINQ, SQL Server Management Objects (SMO), ASP.NET, Nodejs, Python,

**Database Experience:** SQL Server 2016/2012/2005/2000, Oracle 11g/10g/8i/9i/, MS-Access 2007, Mongo, Cassandra, Redis

**Web servers:** Internet Information Server (IIS) 6.0/7.0/10

**Version Control Tools:** Visual Source Safe, TFS, SVN, GitHub, GIT, Bitbucket

## Education & Certifications

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Bachelor's in engineering (Electronics & Communication) – B.E. First class with distinction.

M.S. in Software Systems, BITS Pilani, India – First class with distinction.

Microsoft Certified Professional (MCP in C# & SQL Server)

Brainbench Certified Professional in ASP.NET and C#.

## Professional Experience

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**Bank of America / Merrill Lynch**

**Jan 2011 - Till Date**

### Vice President; Feature Lead - Technology

Under Digital Platforms Technology, I have been contributing to the Online Wealth management LOB applications such as:

eSignature, Secure Message Center, Alerts, Margin & Options applications, Client Communications Center, Statements (Merrill & Private Bank), Private Bank Performance Reports, Asset Tools & Calculators, PB Customer Care Center, MAP, WMO & a host of internal tools.

### Roles & Responsibilities:

- Analyze, design, develop, upgrade various line of business applications using N-tier architecture with the latest technologies like C#, ASP.NET, WEB APIs, LINQ, JSON, CORS, HTTP client libraries, caching, log4net, repliweb, NAS storage server for data.
- Contribute to the design & implementation of reusable business domain models of the middleware components using the design patterns like singleton, repository pattern, object-oriented concepts, factory patterns, dependency injection.
- Implement User Interface, widgets using frontend technologies like HTML, CSS, JavaScript, Typescript & frameworks like jQuery, bootstrap, Angular, React, tooling infrastructures like GIT, NPM, NodeJS.
- Developed Angular services for client-side instrumentation, data fetch, service proxy, caching, etc.
- Work on Database design, stored procedures, functions, triggers, performance tuning.
- Implemented security modules using internal security standards, SSO for user authentication & authorizations.
- Define, onboard & deploy product installer packages (MSIs) via CICD process, write custom PowerShell scripts, vbs scripts etc.
- Interact with technology partners like Engineering, Architecture & Testing teams to ensure successful design build, deployment, and prod release of the applications.
- Play a team lead role & as an individual hands-on contributor. Mentor juniors. Document & share knowledge artifacts.
- Guide team members with skills and practices (planning & estimation, peer reviews and other engineering practices).

- Identify skill and role gaps, and work with the Technology Manager to address them. Work with Technology Manager in creating resource contingency plans where required.
- Managing Sprint Review and Planning meetings, project conflicts etc. Creating and assigning tasks to the dev members in the team.

Under GWIM Frameworks team, I have worked as a **Lead Developer** on the applications such as SIMON, App Builder, ETASC User Portal, MLPF Mobile, UX Prototypes Portal Framework, Presentation Framework, PFPAD.

#### **Roles & Responsibilities:**

- Exposed MLPF Mobile device detection capability by developing REST API to deliver as a service component to other app teams within.
- Platform upgrade to new version & developed internal support & utility responsive design apps using mobile frameworks (HTML, CSS, JS) These apps use MLPF mobile component for device detection.
- Involved in design & implementation of client-side functionality using HTML5, CSS3, AngularJS, JavaScript techniques.
- Developed MVC Web APIs to provide for middleware implementation like repository services & feedback services.
- Contributed to database design & development in SQL server.
- Created sample UI components & feedback widgets to demonstrate prototype Framework concepts.
- Involved in development of reusable CDN product (MLCDN), reusable across dev groups to deliver content like static content, JS libraries, app assets etc. customized for Bank of America.
- Worked on design & implementation of SQL cache notification architecture, windows service for API dynamic data refresh upon new Configs publishes.
- Involved in Database design for this module, stored procedures & REST Web API services.
- Developed UI using ASP.NET MVC, JavaScript, jQuery, jQueryUI

**Tech:** C#, ASP.NET, MVC, Web forms, Web APIs, WCF, ASMX, HTML, CSS, JavaScript, HTTP, Ajax, Handlebars, Angular, React, ADO.NET, Entity Framework, LINQ, T-SQL, Nuget, Repliweb, PowerShell, NPM, jQuery, GIT, Node, Windows service, .NET Caching, Session, SFTP, AutoSys, CICD, IBM MQ, SQL Server 2016, 2012, Oracle, Microservices, IIS 10, 8.5, 7, Silverlight 5.0, XML, JSON, SMO, NUnit, Log4net

**Royal Bank of Canada, NYC**

**June 2010-Jan 2011**

**Senior .NET Developer/Consultant**

#### **Project: Muni Markets Portal & RBC bond Direct Integration**

This is an integrated platform solution developed for the Municipal Finance of Capital Markets, and fixed income group. The application helps automate all the deal transaction processes, sales & trading activities, underwriting, syndicated deals etc. with integrations to RBC's popular Fixed Income electronic trading platform bond Direct which is for Institutional Clients, and is made to receive its important features like Live Pricing Updates, real-time online trade plotter, pricings, ratings, inventory updates of issues etc.

#### **Roles & Responsibilities:**

- Involved in the **requirements gathering, test driven development & continuous integration** methods of software process.
- UI design & implementation using ASP.NET, Telerik Ajax web controls, HTML, CSS
- Developed few of the key interfaces like deals search & display, historical bonds transactions data using Silverlight 3 and WCF services.

- Involved in development of one of the key modules which employs domain specific quant to put together an optimal portfolio of bonds to meet the fund's future liabilities. This involved historical data analysis and complex analytical business logic.
- Responsible for developing modules of the application like workflow interfacing & integration between document management system & PEGA system for deal transactions etc. Used .NET built in Cryptography algorithms to hide sensitive information related to the deal wherever necessary.
- Wrote .NET wrapper for authorization & exposed this as a SOA - WCF service for common usage across different groups.
- Full module implementations using **Web forms, ASP.NET, AJAX, Java Script, jQuery, Telerik** controls, SQL Server **Stored procedures, functions**, tiered architecture, **design patterns** etc.
- Used **C#** language features like LINQ developing application logic, interfaces & OOP principles.
- Used **ASP.NET AJAX** blocks in the web pages to implement AJAX functionality.
- Developed SSRS reports for daily feeds and SSIS packages to dynamically generate the trade and underwriting reports for trading desk and underwriting people.
- Coded several complex stored procedures, functions, and SQL queries in SQL Server 2005.
- Gained knowledge on RBC proprietary FX Trading tool **FlexDirect** during knowX, an annual program for cross domain product training sessions.

**Tech:** C#, .NET 3.5,3.0, 2.0, Java Script, ASP.NET 3.5, Silverlight 3, NUnit, ADO.NET, LINQ, XML WCF web services, XSLT/XSD, IIS 6.0, HTML, OOPS, Multithreading, SQL Server 2005, Visual Studio 2008, Ajax, design patterns, Telerik Controls, Microsoft Enterprise Library, Documentum, SSIS, SSRS, IBM DMS, MQ, Windows Service, Windows server 2003, JIRA bug tracking Tool.

**United Parcel Services (UPS), NJ**

**Jan 2009 – Jun 2010**

**Senior .NET Developer/Architect Consultant**

#### **Project: CCPS**

UPS financial systems domain application. Helps UPS manage & sort out the declined credit card transactions of the account holders who utilize various types of parcel services of this logistics giant across the United States & Canada.

This is a web-based software solution that's developed using latest .NET technologies like ASP.NET 3.0, Ajax, SQL Server 2005, SSRS, OOPS, Design Patterns, multithreading, WCF web services etc. The system interfaces with Paymentech, a third-party service that does the actual transactions and sends the result to our application with all the necessary status. The CCPS assigns the declines to different processors (users) based on various role rules configured within the system. The supervisor module monitors all these resolutions and has its say in the final approval process. Credit Card numbers are tokenized within the system using RSA Security infrastructure. The declined transactions are resubmitted to paymentech for resolutions through this system.

#### **Roles & Responsibilities:**

- Involved in the **requirements gathering, scrum, test driven development & continuous integration** method of software process all through the development cycle. Used the third-party tool named **Rally** for practicing the agile model development process.
- Responsible for developing the key modules of the application like file import, file processing, auto assign transactions etc.
- Design & development of business reports in the system using SSRS.
- Wrote .NET wrapper for SOM (RSA Security Object Model) for Tokenization/Detokenization of credit cards & exposed this as a SOA - WCF service for common usage across different groups. This interfacing works with a C++ based RSA security system.
- Developed a support desktop tool using WinForms to upgrade existing credit card related data in the system to encrypted format to make it compatible with the latest system.
- Full module implementations using **Web forms, ASP.NET, AJAX, SQL Server Stored procedures, functions**, tiered architecture, **design patterns** etc.
- Country code parameterization to isolate between US, Canada, or any specific country users.

- Developed **automation** solution for key financial business processes using **SSIS packages**.
- Used **multi-threading** principles, call back features for long running application tasks.
- Used **C#** language features like LINQ developing application logic, interfaces & OOP principles.
- Actively involved as part of **design, programming in C#, unit testing**.
- Developed the complete front end user interface & application using ASP.NET.
- Used **ASP.NET AJAX** blocks in the web pages to implement AJAX functionality.
- Worked on **UNIX shell scripting** to connect to FTP servers for downloading daily transaction files.
- Using **Crontab** processes, scheduled these scripts to execute **Sybase** procedures to generate export files from database
- Used **ASP.NET** grid view, form view, repeater controls, CSS style sheets, JavaScript etc
- Involved in Project builds, integration & deployment & customer support activities.

**Tech:** C#, .NET, VB script, VB.NET, C++, Java Script, ASP.NET 3.0, NUnit, ADO.NET, XML WCF web services, WinForms, XSLT/XSD, IIS 6.0, HTML, SQL Server 2005, Visual Studio 2008, Ajax, design patterns, Windows server 2003, UNIX Shell Scripting, Sybase DB.

**New York Life Insurance, Westchester, NY**  
**Senior .NET Developer/Architect**

**Sept 2008 – Jan 2009**

#### **Project: NYL Data Access Interface**

Helped develop .NET adapters for interfacing with their existing Java based data access framework components. NYL Data Access framework is a robust technology platform developed for accessing corporate data.

Use of web services & Runtime Bridge called JnBridgePro. These adapters were hooked as the main interfaces to the Java side environment which was running with all these existing domain components. These NYL domain components represent data associated with Consumers (Insureds, Policy owners, Annuitants, Mutual Fund holders, etc), Producers (sales agents a.k.a marketers) and Financial Contracts (policies, securities, annuities etc). .NET based applications are required to use these Java components to access data from Producer, Consumer & Financial Contract data stores.

#### **Roles & Responsibilities:**

- Responsible for understanding the **requirements** & doing a **case study**.
- Conceptualized & implemented the proof of concept with different possible interfacing approaches between .NET & Java like web services, **runtime bridges**, shared databases & integration brokers.
- Worked out the best **interoperability scenarios** conforming to existing standards, deployment & architectures etc.
- Finalized on to the two adapter development approaches namely **web services** & runtime bridges.
- Used **C# 2.0** language features developing application interfaces & OOP principles.
- Actively involved as part of **design, programming in C# unit testing**.
- User interface & application using ASP.NET.
- Used **ASP.NET AJAX** blocks in the web pages to implement AJAX functionality.
- Used **ASP.NET** grid view, repeater controls, CSS style sheets, JavaScript etc
- Involved in Project builds, integration & deployment.

**Tech:** C#, .NET (ASP.NET 2.0, ADO.NET, XML web services, XSLT/XSD, IIS 6.0), HTML, SQL Server 2005, WinForms, Visual Studio 2008, JnBridgePro, design patterns, Core Java, J2EE Environment, Windows XP

**Honeywell**  
**Senior Software Engineer**

**March 2006-Sept 2008**

#### **Project 1: e-Terminal**

This is a self-service shipping kiosk targeted for truck drivers to self-operate the kiosk based on the reference shipping order. The objective is to get the necessary shipping documents with digital signatures related to their shipping & logistics. It is a touch screen kiosk and software application is customizable to each of the driver's regional languages.

### Roles & Responsibilities:

- Responsible for writing out and baselining all the **functional specifications & diagrams** in **MS Visio**.
- Conceptualized and implemented the **web service** architecture for finalization & printing of documents.
- Designed the **SQL Server** table structures & written stored procedures, triggers using **T-SQL**.
- Actively involved as part of **detailed design, programming in C#, unit testing** using **NUnit** framework and **deployment** activities.
- Used **C# 2.0** features like **partial classes**, **Generic List** and **Nullable** Types in developing application frameworks.
- Contributed to **code reviews**, **defect tracking** using **Siebel tool** etc.

**Tech:** WinForms, ASP.NET, C#, XML, SQL Server 2005, SQL Reporting Services, Biometric Fingerprint Recognition, Digital Signature handling etc., WinXP, Win2000, Win2003

### Project 2: Active Trend Charting Tool

A solution that would comprise Active Widgets used as part of an existing OptiStudio environment to view trends. It is a graphical tool used to display loads and potential bottlenecks in a plant at each stage in the mill starting from the paper machine and including winders, sheet makers, wrap lines and the warehouse. These widgets are used in an array of machines.

### Roles & Responsibilities:

- Participated in **requirements** gathering & clarifications process.
- Involved in design and development of a consistent user interface using **WinForms** and **user controls**.
- Used **C# 2.0** features like **partial classes** and **Generic List** in developing application frameworks. Worked on POC submissions to arrive at the right charting component among **Tee Chart**, MS Chart & National Instruments.
- Developed key interfaces for the application using **OOAD** principles & **patterns** to make it consumable by the legacy application environment.
- Developed an integration module that processes the **XML** file and uses **.NET Serialization**, **De-serialization** principles to load **type safe objects** for processing.
- Performance improvement activities & code refactoring.
- Actively involved as part of design, coding, testing and delivery activities.

**Tech:** WinForms, C# 2.0, .NET, XML, SQL Server 2005, Oracle 10g, Teechart & Far point Spread Components, WinXP, Win2000, Win2003.

### Project 3: OptiVision

OptiVISION is a Manufacturing Execution System (MES) developed specifically for Pulp and Paper Manufacturers and is designed to be the link between floor level systems (DCS, QCS, Rewinder, etc.) and upper-level business systems (ERP). The functionality provided by the system is suitable for supporting single or multiple Mill Operations from Order Entry through Shipping. OptiVISION can also integrate with an ERP Vendor. It is a Supply Chain Management solution for industrial process automation. It is a one-stop solution right from order entry up until shipping.

### Roles & Responsibilities:

- Participated in detailed designing, feature enhancement release activities etc.
- Implemented **Unicode**, **.NET globalization & localization** features.
- Implemented **log4net logging & configuration** framework for the entire product.
- Developed customized quality reports using **SQL reporting services**.
- Developed Database Updater tool for DST compatibility Here I developed a common utility class and used concepts like **polymorphism** to support different database providers like **SQL Server**, **Oracle**, **DB2**, & **Sybase** using specific **ADO.NET** APIs.
- Involved in a six-sigma Green Belt project that was aimed at improving the software development process and increasing the productivity ratings with a focus on our product domain.

**Tech:** C#.NET, WinForms, Crystal Reports, XML, third party tools, SQL Server 2000, Oracle 10g, Sybase, Windows Service, SQL Reporting Services, WinXP, Win2000, Win2003, UNIX.

**Nous Infosystems**

**Jan 2004 to March 2006**

**Software Engineer**

**Project: Project Appraisal Software**

The target users of this application are the Housing Associations. This software is used to assess the financial viability of the housing project before bidding for it to the Housing Corporation. This application has Accounts as part of it, which deals with the financial process. The appraisal stage of the project evaluates the project before its inception where the management phase looks after the cash flow, profit, and loss etc. on a long-term basis.

There is a reporting component for the application that is developed using **excel automation**. All communication to the database server happens through the **Web Service Layer**.

This is having a **smart client architecture** with a centralized **database server (SQL Server 2000)** and features **zero touch deployment**.

**Roles & Responsibilities:**

- Involved in the complete life cycle (**SDLC**) of the product.
- Initially worked on **UML diagrams** to write **state flow diagrams**, **class diagrams** for the specific scenarios of application using **StarUML & MS Visio**.
- Worked in the analysis, design, and development of various sections of the application in adherence to the application framework and **OOP** principles, **refactoring** etc.
- To upgrade existing customer databases to use into our application, I wrote an **ADO.Net component** to pull the data from **MS ACCESS** to **SQL server**.
- Wrote the entire **business logic** for the set of budget forecasting rule engine **calculations**.
- Used **NUnit** framework to write unit tests for the **business layer**.
- Used **ANTS memory & performance profiler** to investigate memory leaks as part of the process to speed up the application and improve overall performance.
- Used the concepts of **database connection pooling**, **data caching** for loading business entities.
- Worked on the design of the **reporting framework** using **MS Excel automation** and reporting front end.
- Involved in the preparation of the **Technical Documentation** of the product.

**Tech:** C#.NET, WinForms, UI application blocks, .NET Web service (smart client architecture, works with intelligent entities), WinXP, Win2000.

**Project: Questionmark Web Integration Service (Perception 360)**

It is an intranet-based web application to provide customized "Employee Review Assessment".

**Roles & Responsibilities:**

- Played an active role in **GUI design** using **web forms & controls**.
- Involved in writing of **stored procedures**.
- Involved in creation of **user controls**.
- Worked on **business logic layer & role-based security features** of the application.
- Involved in unit testing.
- **Deployment** of web pages in **Internet Information Server (IIS)** at the hosting server.

**Tech:** ASP.NET, C#, SQL Server 2000, Windows XP, Infragistics (v4), XML, CSS, Java Script, IE, Netscape, IIS 5.0, WinXP, Win2000, XML, COM component service.