

# Monika Sankare

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## Career Objective:

To work for an organization and add value and growth to it by contributing towards its development using my knowledge and experience through my honest efforts constantly.

## Summary:

- Mirth connect Certified Professional with 18 Plus years of strong experience in design, Architect, development and testing of client/server, GUI & multi - tier (DNA) applications using C/C++, VC++, Win32, SDK, MFC, GUI, ODBC, ADOX, COM/DCOM, COM+/MTS, WTL, ATL, DirectX 8.0, C#, .NET, ASP.NET, Visual Studio.NET, XML, XSL, XSLT, XAML, MS SQL Server, BI, SSIS, Datawarehouse - ETL, PL/SQL, Oracle8.i, MS Access, Java, J2EE, Visual Basic and ASP3.0 in Windows NT 2000/98/95, XP, win 7.0, HIE, HL7, ADT, CCD, CCDA, PH/BH, FHIR etc.
- Involved in Design of Class diagrams and Sequential diagrams based on OOAD (Object Oriented Analysis and Design) using UML.
- Implemented many HIE integrations into Clinical Data Repository using Mirth Connect .
- Integrated many types of Message Formats including HL7, CSV, Pipe Delimited Text Files etc using Mirth Connect Tool
- Integrate many CCD and PH/BH data into CDR.
- Experience in creating Use cases and designing visio diagrams using MS Visio.
- Experience in study of System specifications, requirements and program specification for the COM Components in the middle layer. Used design patterns (Singleton, Façade, Factory Method, Abstract Factory) for implementing business functionality.
- Excellent experience in multi tier banking applications, financial applications including writing middle ware components using VC++, COM, ATL and deploying into COM+, and Communicating data with the host (mainframe) using SNA Server.
- Experience in design and development in MEMLEAK detection Tools (Numega BOUNDS CHECKER), Visual Source Safe (VSS). Experience in Multi threaded Applications.
- Extensive exposure in C, C++, VC++, MFC, COM, DCOM, ATL, STL, ADO, WTL, ODBC, ActiveX controls, MSAccess, SQL Server, UML & Rational Rose, Visual Source Safe, TCP/IP, WinSockets, Install Shield 9.0
- Experience with implementation of WebServices using ASP.NET/VC#/XML in .NET environment. Also expertise with Winforms, WebForms using VC#, .NET, ASP.NET
- Experience in Digital Signal Processing DSP Applications.
- Experience with porting applications from 16 bit to 32 bit and in internationalization of existing Applications.

- Expertise in creating COM Components and ActiveX controls using ATL and ADO. Expertise in memleak detection tool using Numega Bounds Checker and Visual Source Safe.
- Experience in good documentation of the flow process of an application. Also design of flow diagrams for the modules.
- Experience in working with Install Shield 9.0 to create Setup.exe
- Experience with Design tools like Microsoft Visio to design the high level design documents and detailed designs as well as use case diagrams.
- Experience with version control Systems visual Source Safe 6.0 and ClearCase.
- Excellent analytical, problem solving, communication and interpersonal skills, with ability to interact with individuals in a team and coordinating the activities of a team.

#### **TECHNICAL SKILLS:**

**Skills:** Languages C++,C#/VC#,XML,XSL,XSLT,HTML-DHTML,VBScript,STL, MFC,Java script, ASP,.NET, Visual Studio.NET, Win32 SDK, ATL,WTL, VLC, E4X

**GUI:** VC++6/5,Visual Basic 6/5, Eclipse,VC#,WPF, XAML

**Databases:** MS Access, SQL Server 6.5,Oracle 8.i, Oracle 10g, ODP.NET, BizTalk, DB2,PLSQL

**Tools:** 3R Project, Numega Bounds Checker(for Memory Leaks Detection), VLC, PLC. Biztalk server 2006, Verastream, Mirth Connect Integration Engine tool Smart Draw, Microsoft Visio., Scarab tool for defect tracking

**Technologies:** COM/DCOM,MTS,COM+,ASP,ASP.NET,DIRECTX8.0,.NET, SOAP, Angularjs, JQuery, AJAX, BootStrap, WCF, WPF, TCP/IP,WinSockets, Install Shield (9.0)

**Data Access:** ADO, ADO.NET, ADOX, ODBC, OLEDB (Object linking and Embedding)

**Design Tools:** UML and Rational Rose

**Version Control:** Visual Source Safe 6.0 ( VSS), ClearCase, Operating System Windows 2000/XP/NT/95/98.

#### **PROFESSIONAL EXPERIENCE:**

**Confidential, Caritas, PA**

**Sr Application Tech Lead**

#### **Responsibilities:**

- I have made enhancements to the existing HIE Lines of Business, to improve the performance and reusability of Mirth Connect Channels and Code Template Libs
- Designed, Architected and Implemented many new Lines of Business and HIE integrations into Clinical Data Repository(CDR) using Mirth Connect .
- Integrated many types of Message Formats including HL7, CSV, Pipe Delimited Text Files etc using Mirth Connect Tool

- Designed and Implemented Many Architectural improvements to the HIE ADT Message processing into CDR.
- Implemented daily Smart Report Generations for Care Managers .
- Integrate with Enterprise Data Ware House(EDWH) and ESB services with CDR to generate Smart Reports to Care Managers.
- Re-Architected the Mirth Connect Implementation to integrate the HIEs into CDR DB.
- Designed, Architected and New implementations to Integrate the many HIEs into CDR DB.
- Created HTTP Listener channels to receive messages from HIEs in Real Time .
- Designed, Architected and Implemented Monitor tools using C#, .Net, winforms .
- Integrate with ESB (Webservices) to check eligibility etc to validate the eligible members etc before pushing to the DB.
- Designed, Architected and Implemented CCD integrations with CDR DB .
- Designed, Architected and Implementing PH/BH integrations with CDR and Real Time Services (RTS).
- Designed, Architected and Implemented 3rd Party Navinet Portal Integration .
- Implementing JIVA ADT Integration using ZeoMega API .Integrating with 3rd party JIVA Provider Portal system.
- Integrate mirth connect with ORION to get notifications of Mirth Connect System Status.
- Integrate mirth connect with SPLUNK to centralize logging of Mirth Connect errors .
- I have made enhancements to existing Stored Procs and created new Stored Procs, Views in ORACLE DB.
- Generate periodical Reports using Splunk.
- I have been fixing bugs in the existing applications .
- Working on implementing Libraries for Data access and DB Updates using C#, ASP.Net.
- Working CDR Viewer Application to get complete access to the Clinical data Repository details using ASP.Net, Angular Js 2.0, Boot Strap etc .
- Working on Monitoring Application using web forms, JQuery and AngularJs 2.0, AJAX, JQuery.
- Working on Moving the Files to the Data Lake for Archival of files.
- Working on Prototypes using FHIR for next phase of Integration.
- Working and evaluating on New IHE profiles .

**Environment:** ORACLE, .NET, C#, REST APIs, Hadoop, javascript, ESB Services, DataPower, Splunk, PostGRES DB, Oracle 11g, Mirth Connect, FHIR, HIE, IHE, HL7v2.x, HL7 v3, CCD, CDA, ADT, X12, EDI 837, SYBASE, SOAP, REST, ESB Web Services, MACCESS (Document Storage), JIVA(Providers), FACETS(Claims System), EDWH, TFS for version control, GIT, ITSM Heat, Hadoop, Data Lake, MS

Visio, HTTP, Web Services, Windows 7.0, JQuery, Angular Js 2.0, AJAX, Bootstrap, Javascript, GIT, MS Visio, Visual Studio 2013.

### **Confidential, PA**

#### **Director of Development**

##### **Responsibilities:**

- Designed, Architected and Implementing Web Portal site for PCP Search .
- Creating Libraries for Data access and DB Updates using C#, ASP.Net
- Designed and Implemented Data Access Layer using C#.Net
- Designed DB to store the Data .
- Creating Stored Procedures and SQL Queries in SQL DB .
- Designed and Implemented Web Pages using web forms, JQuery and AngularJs 2.0, AJAX, JQuery.
- Enhanced the UI using Bootstrap, CSS 3.0 etc
- Integrating the code from all the modules UI, Middleware and DB.
- I have been fixing bugs in the existing applications .

Environment: SQL Server, .NET, C#, JQuery, Angular Js 2.0, AJAX, Bootstrap, Javascript, GIT, MS Visio, Visual Studio 2013, Windows 7.0 .

### **Confidential, Malvern, PA**

#### **Sr Software consultant**

##### **Responsibilities:**

- I have made enhancements to the existing Clindoc Application an EMR Desktop Application using C#, .NET, ADO.NET, ASP.NET, Win forms, etc
- Improved Performance of Loading Notes by removing many multiple DB connections to a couple of connections .
- Created a new permanent performance logging for modules to the DB for future analysis .
- Created New module of FormBuilder using WPF, WCF, and C#
- Used ADO.NET for data access from MS SQL database.
- Creating HL7 messages for Clinical data .
- I have made enhancements to the existing Stored Procs and created new Stored Procs in SQL DB.
- I have been fixing bugs in the existing application .

Environment: MS Sql Server 2010, BI, SSIS, HL7, .NET, C#/VC#, WPF, WCF, WinForms ADO.NET, SQL Server 2010, Oracle 11g, Multithreading, TFS for version control, MS Visio, Windows XP, Windows 7.0 .

**Confidential, Philadelphia, PA**

**Sr Software consultant**

**Responsibilities:**

- I have made enhancements to the existing Eforms Application, a portal web Application using C#, .NET, ADO.NET, ASP.NET, Web forms, web user controls etc
- I have added new forms /features in Eforms Application .
- Used ADO.NET for data access from MS Access database.
- Used WPF (XAML) for budgeting Application .
- I have added new forms /features in Budgeting Application .
- Used Webservices and WCF for Asynchronous Data communication .
- I have made enhancements to the existing Budgeting Application using WPF, WCF, ASP.NET, SQL Server .
- I have been fixing bugs in the existing application .

Environment: MS Sql Server 2005, BI, SSIS,, XML,XAML, WPF,.NET, C#/VC#, WCF, XML Web Services, WinForms, WebForms, ASP.NET, AJAX, ADO.NET, XSL, SQL Server 2005, Oracle 11g, Multithreading, TFS for version control, MS Visio, Windows XP, Windows 7.0 .

**Confidential, King of Prussia, PA**

**Sr Software Engineer**

**Responsibilities:**

- Designed, Architected and I have implemented the entire EDI278 Application portal web Application using C#, .NET, ADO.NET, ASP.NET, Web forms, web user controls etc .
- Parsing and processing the HL7 Messages and store into DB .
- Used ADO.NET for data access from MS Access database.
- Designed, Architected and Implemented Biztalk application for HSM Charges processing using Biztalk server 2006 R2, Vb.NET, .NET.
- Designed, Architected and Implemented various web applications for BOS, IS etc using C#, .NET, ADO.NET, ASP.NET, Web forms, web user controls etc .
- Designed, Architected and I have implemented various SSIS packages using SQL Server 2005 Inteegration services .

**Environment:** MS Sql Server 2005, BI, SSIS, Datawarehouse - ETL, Biztalk server 2006 R2, X12, DICOM,XML, .NET, C#/VC#, WCF, XML Web Services, WinForms, WebForms, ASP.NET, AJAX, ADO.NET, HL7, XSL, SQL Server 2005, Oracle 11g, Multithreading, TFS for version control, MS Visio, Windows XP, Windows 7.0 .

## **Confidential, MALVERN, PA**

### **Sr. Software Consultant**

#### **Responsibilities:**

- I have implemented the entire module of the Breast care portal web Application using C#, .NET, ADO.NET, ASP.NET, Web forms, web user controls etc
- Used ADO.NET for data access from MS Access database.
- Implemented enhancements to the existing RRE portal application and also fixed bugs .
- Used GWT(Google Web Toolkit) to generate the javascript code from the java code.
- Fixed bugs in the software during the testing process phase.

**Environment:** C++, VC++ 6.0, DICOM,XML, .NET, C#/VC#, WCF, XML Web Services, WinForms, WebForms, ASP.NET, AJAX, ADO.NET, XSL, SQL Server 2005, Oracle 10g, Multithreading, Clearcase for version control, MS Visio, Windows XP, Eclipse.

## **Confidential, READING, PA**

### **Sr. Software Consultant**

#### **Responsibilities:**

- I have implemented the entire FiveMillDataServices Middle tier Application module using C#, .NET, ADO.NET, Oracle DataAccess Services, ODP.NET Notification services and Microsoft biztalk services API .
- Created Entity collection objects and generated the XML Messages and exposed the Interface to the Biztalk server .
- Setting Up Send /Receive ports in BizTalk to send and receive the messages from the mainframe.
- Setting up Queues for the ports to store messages when the MainFrame is not ready.
- Used Oracle PL/SQL to create the Oracle packages, Stored procedures.
- I have written the PL/SQL Stored Procedures in Oracle 10g.2 .
- Used ADO.NET for data access from FiveMillDataServices .Net Application Oracle data base.
- Used the ODP.NET for the Oracle Notification Services to receive the notifications from the Oracle database to the FiveMilldataservices Application.
- Created the Reports using the C#, .NET Crystal Reports, and Winforms.
- Created the Online Reports using the C#,ASP.NET, .NET Crystal Reports, and Webforms.
- Developed .NET test applications using C#, VC#, .NET winforms, to test the FiveMillDataServices as well as crystal reports applications .
- Created the MSBuild project to build the various modules .

- Wrote the new design documents and workflow diagrams, documentation etc for the above applications.
- Designed unit test cases to check the correct behavior of the application.
- Fixed bugs in the software during the testing process and verification phase.

Environment: C++, VC++ 6.0, MFC, GUI, Win32 SDK, ATL3.0, COM/DCOM/COM+, ADO, XML, .NET, C#/VC#, WinForms, MSBuild, WebForms, ASP.NET, .NETCrystal Reports, ADO.NET, SQL Server 2005, Oracle 10g, ODP.NET, IBM MQ Series, Microsoft Biztalk 2006, Multithreading, VSS for version control, MS Visio, Windows XP.

### **Confidential, TARRYTOWN, NY**

#### **Sr. Software Engineer**

##### **Responsibilities:**

- The main Application is communicating to the Robotic APIs to control the Robot Arms . Fixed bugs arised due to incorrec calling of the APIs.
- I was responsible for the entire implementation of the Inlabbing feature using VC++, MFC, COM/DCOM, Multithreading, thread synchronization (Critical sections, events etc ) WinSockets, TCP/IP.
- Implemented Singleton COM components using VC++, MFC.
- Created the HL7 message formats to communicate to the Lab System (LAS).
- Implemented the application as a systray icon.
- Used ADO for data access from the SQL Server data base.
- Establishing communications between LAS subsystem and Inlabbing application using DCOM.
- Establishing communications between LAS Inlabbing application and centralink using TCP/IP winsockets.
- Implemented the Decapper simulator application using C++, MFC, Multithreading, VC++, The communication uses Modbus protocol, TCP/IP etc.
- Implemented the change in the Routing logic and necessary VLC changes necessary to accommodate the new behavior.
- Worked with VLC and databse to change the sample routing algorithms .
- Developed .NET tool using C#, VC#, .NET, to convert the XML file containing error messages to SQL server data base and vice versa.
- Used ADO.NET to access the Data base.
- Wrote the new design document for the the new enhancement .Also changes are made to the interface Documentation when ever the design changes are made to the existing design.
- Designed unit test cases to check the correct behavior of the application.
- Fixed bugs in the software in the VLC as well as in the C++, COM Interface components.

- Prepared and reviewed the new requirements for the Centrifuge Interface enhancements.
- Used DevTrack for defect tracking.
- Involved in the Safety and Risk Management trainings, Risk management analysis and mitigation activities.

**Environment:** C++, VC++ 6.0, MFC, GUI, Win32 SDK, TCP/IP, Windows sockets, ATL3.0, COM/DCOM/COM+, ADO, XML, .NET 1.1, VS.Net 2003, C#/VC#, ADO.NET, SQLServer 2000, HL7, VLC (visual logic controller)Multithreading, Windows Services, VSS for version control, MS Visio,Dev Track, Windows 2000/NT/XP.

**Confidential, NEW YORK, NY**

### **Sr. Software Engineer**

#### **Responsibilities:**

- Responsible for implementing MiddleTier COM Components in C++,VC++6.0, COM DLLs
- Customized the MS Outlook for EPM services.
- Implemented the COM components to manipulate the registry.
- Study of System specifications and program requirements for the COM Components in the middle tier.
- Fixed bugs in the customizing Document Management Solutions application .

Environment: C++, VC++ 6.0, MFC, GUI, Win32 SDK, ATL3.0/7.0, COM/DCOM, MS Office components, XML, XSL, ASP.NET, ADO.NET, C#/VC#, SOAP1.2, SQLServer 2000, Windows XP.

**Confidential, New York, NY**

### **Sr. Software Engineer**

#### **Responsibilities:**

- Responsible for implementing MiddleTier COM Components in C++,VC++6.0, COM /COM+ DLLs
- Responsible for implementing MiddleTier COM Components in VB 6.0, DLLs
- Implemented the Socket Listener(windows service) using Socket API in order to listen to the requests coming from the various terminals, creates threads for each request (Multi threaded )and transform the XML and post ( via HTTP )to the BreezeOne server .
- Implemented the Socket Client using VC++/COM/ATL, Socket API to post the requests to the listener for testing the various services provided by BreezeOne.
- Implemented multi-threaded client application using MFC/VC++6.0 to simulate the multi client access to the Server.
- Designed High Level Flow Diagrams, Database diagrams as well as detailed diagrams using Microsoft Visio tool.
- Designed low level diagrams(LLD) for the new process and code flow.



- Involved in Design of Class diagrams and Sequential diagrams based on OOAD (Object Oriented Analysis and Design) using UML.
- Implemented the ACHEngine Components to process ACH for Merchants and submit the to Global ACH(Automated Clearing House).
- Study of System specifications and program requirements for the COM Components in the middle tier. Used design patterns (Singleton, Façade, iterative) for implementing business functionality.
- Implemented SQL Stored procedures for Database handling .
- Implemented VB6.0 EXE application to issue refunds to the customers.
- Implemented VB6.0 EXE application to issue Sale request to the Merchants.
- Implemented Data Access components in VB 6.0 using ADO.
- Implemented TaxiServices Dll in VB 6.0, ADO, COM+ to process the wireless terminal requests.
- Implemented ASP Pages using ASP3.0 in Visual InterDev 6.0 to route the new taxi requests.
- Implemented Data Accessor components in VC++ 6.0 using OLEDB.
- Implemented webforms using ASP.NET/VB.NET for the new generic multi requests from various terminals.
- Prepared interface Documents for the design of breezeone services.
- Upgrading the Application to multi business customers.
- Fixed bugs and memory leaks for each iteration.

**Environment:** C++, VC++ 6.0, MFC, GUI, Win32 SDK, ATL3.0/7.0, COM/DCOM/COM+, XML, XSL, HTML/DHTML,HTTP, ASP3.0, .NET, C#/VC#, SOAP1.2, SQLServer 7.0, Web Services, winforms, webforms, VSS 6.0, MS Visio(2), Windows 2000/NT/XP.

**Confidential, Dallas, TX**

**Sr. Software Engineer**

**Responsibilities:**

- Responsible for writing in C++,VC++6.0,COM/COM+ Dlls called Shell Extensions using windows shell programming.
- Created a web view of the virtual folder (using C++/VC++6.0/COM/COM+) on the windows explorer to view the published files.
- Designed High Level Flow Diagrams as well as detailed diagrams using Microsoft Visio tool.
- Involved in Design of Class diagrams and Sequential diagrams based on OOAD (Object Oriented Analysis and Design) using UML.
- Designed Usecase diagrams for the File Publish System entire user intreraction functionality.

- Study of System specifications and program requirements for the Plug-in COM Components in the middle layer. Used design patterns (Singleton, Façade, iterative) for implementing business functionality.
- Implemented the Publish Tool to publish content independently, this tool is GUI tool implemented using MFC/VC++6.0, and FTP API
- Extended the functionality of the Office products like MS word, MS Excel etc using VB6.0
- Implemented a Webservice using VC# / ASP.NET/ XML on the server side to update the port number in the server side SQL Sever Database .
- Implemented some common C#/ADO.NET library classes for handling certain common functionality and tested them for the boundary conditions .
- Used ClearCase for the version controlling .
- Worked with Install Shield (9.0) to build a setup.exe to install the entire application on any system by using a CD.
- Changes are made to the interface Documentation when ever the design changes are made to the existing design.
- Designed test cases for each release.

Environment: C++, VC++ 6.0, MFC, GUI, Win32 SDK, Windows Shell API, FTP API, ATL3.0/7.0, COM/DCOM/COM+, XML, XSL, HTML/DHTML,, .NET, C#/VC#, SOAP1.2, SQLServer 2000, Web Services, winforms, webforms, ClearCase for version control, MS Visio(2), Install Shield (9.0), Windows 2000/NT/XP.

**Confidential, Memphis, TN**

### **Sr. Software Engineer**

#### **Responsibilities:**

- Responsible for writing in C/C++,VC++6.0, COM components called transaction participants using 3R project wizard.
- Tested the each transaction participant using the Test Harness a GUI tool. Then deploy the components onto the server and tested after integrating with the Presentation Layer.
- Fixed bugs in the TPs as well as in Java classes under J2EE through debugging.
- Fixed Memory leaks using CRT Functions .
- Worked with business analysts to deal with various types of accounts, Mortgage loans, Installment loans and Brokerage trading accounts as well as accounts maintenance, setup accounts etc.
- Worked with eclipse for front office work. Updated Core XML files, wrote request response XSL files for proper transformations. XML was passed using DOM. XML schema was used to validated XML document.
- Responsible for writing some common C++/VC++ library classes for handling certain common functionality and tested them for the boundary conditions as well as memory leaks.

- Looked into the Bugs that were assigned to me in scarab tool and fixed the bugs that are posted in the scarab by the unit testers in each iteration.
- Wrote the interface documents to coordinate with the front office developers.
- Analysing the FRD's and Wrote the interface documents to coordinate with the front office developers.
- Study of System specifications and program requirements for the Plug-in COM Components in the middle layer. Used design patterns (Singleton, Façade, iterative) for implementing business functionality.
- Modified the interface Documentation, when ever the design changes are made to the existing design.
- Involved in the planning, analysis as well as design of FRD's(Functional Requirement Documents) for the enhancements to the existing application.
- Used C#,VC#,ASP.NET, .NET Environment for the development of some web services.
- Used ADO.NET for the data access and XMLSerialization for data storage and transfer.
- Implemented C#, .NET custom class libraries.
- Wrote request,Response XSL,XSLT Files for proper transformation of input, output XML's to and from .NET webservice.

**Environment:** VC++ 6.0, C/C++,GUI, Win32 SDK, ATL3.0, 3R Project, COM/DCOM/COM+, XML, XSL, SNA Server, JAVA, J2EE, JSP, Struts, HTML/DHTML, Visual Studio.NET, ASP.NET, Java Script, C#, VC#, SOAP1.2, Oracle 8i, DB2, VSS, Web Services, Rational Rose, Scarab defect tracking tool, Windows 2000/NT/XP.

**Confidential, Wilmington, NC**

**Sr. Software Engineer**

**Responsibilities:**

- Developed components using C/C++, VC++ 6.0, and Win32 SDK, each of which communicates with control through site interfaces.
- Responsible for writing COM components in C++ using ATL3.0, which can be used ultimately by the ActiveX control. Also tested the components on Multiple Apartments.
- Wrote COM components, which can be used ultimately by ActiveX control.
- Graph control consists of ATL 3.0 and COM. COM + was used for administrating the components as well as packaging and deployment purpose.
- DCOM was used for remote access of the components.
- Used ADOX and ADO for data access and database creation purpose.
- Wrote library C++/VC++6.0 classes to handle strings and variants.
- Detected memory leaks with help of Bounds Checker (tool).

- Responsible for writing some C++,VC++ library classes for handling Strings and variants etc. and Testing them for the memory leaks.
- Designed layout of property pages and debugged and fixed bugs in application.
- Implemented the property pages that are essential for the ActiveX Control.
- Designed and developed GUI using Visual basic, WTL.
- Upgraded the Documentation when ever the design changes are made to the existing design.

**Environment:** VC++ 6.0, C/C++, MFC,GUI, Win32 SDK, ATL 3.0, COM, DCOM, COM +, WTL, ActiveX, Delphi, Visual Basic 6., HTML/DHTML, DirectX 8.0, ADOX, ADO, Active X, OLEDB, MS Access 2000, VSS, Rational Rose, Windows 2000/NT.

SV Trainings