**Roy**

**SUMMARY OF EXPERIENCE**

* 23 years of software development experience in architecting and developing n-tier web, windows and distributed applications.
* Expertise in SCRUM, Lean and Scaled Agile methodologies.
* Expertise in architecting, designing, integrating and implementing end to end B2B and B2C applications using Blazor, Angular, .NET (Core, previous versions), ASP.NET (Core, earlier versions), C#, SharePoint, Power Platform, WCF, WPF, C++, HTML5, CSS and SQL Server.
* Expertise in Micro Front Ends and Microservices.
* Extensively used Entity Framework and ADO.NET to connect to the various databases.
* Expertise in developing SaaS, PaaS and traditional client server applications.
* Proficient in object-oriented analysis and design (OOAD), design patterns and domain driven design.
* Expertise in developing and infrastructure as a service (BICEP) on the Microsoft Azure Cloud Platform.
* Strong focus on teamwork and achieving team goals, result oriented, fast learner.
* Excellent communication and interpersonal skills.
* Expertise in leading multiple teams both remote and local.

**TECHNICAL SKILLS**

* **Programming Languages:** C#, Typescript, JavaScript and C++
* **Web Environment:** ASP.NET (Core and previous versions), MVC, AJAX, jQuery, Bootstrap, Angular, Web API, NGRX, Blazor, CSS, WCF
* **Cloud:** Microsoft Azure Cloud Platform (App Services, Azure Functions. AI, Event Grid, Cosmos DB, Azure Storage)
* **Desktop**: WPF, MAUI
* **Database:** SQL Server 2012, 2016, 2019 and 2022, Azure SQL
* **Infrastructure as a Service:** BICEP and YAML
* **Reporting tools:** Power BI
* **Tools:** Agile, Scrum, Scaled Agile and Waterfall methodologies, Entity Framework (Core and earlier versions),

Visual Studio 2019, 2022, Gitlab, Git, Octopus, TeamCity, Postman, Visio

**Professional Certifications**

* Microsoft Certified Professional Developer for Enterprise Applications
* Microsoft Certified Technical Specialist for Web Applications
* Microsoft Certified Technical Specialist for Windows Applications
* Microsoft Certified Technical Specialist for Distributed Applications
* Microsoft Certified Technical Specialist for Microsoft SharePoint 2007 development
* Neural Networks and Deep Learning Certificate from Coursera
* IC Agile Certified Professional - Agile fundamentals

**WORK EXPERIENCE**

**Devcare Solutions |Chicago, IL| July 2023 – Current**

.NET Solutions Architect

**Client: Corteva Agriscience**

**Project: AgMarketData application – Azure hosted App service doing data ingestion and rule processing for consuming huge excel files sourced from on field sales representatives. This formed the basis of a powerbi reports that displayed the data ingested.**

* Led a month-long discovery effort to determine the requirements and scope of the system to be developed.
* Architected and presented various application approaches to the stakeholders of the system.
* Designed the high level and low-level design of the approved system.
* As part of the development of the system was responsible for creating the development and deployment pipeline in Azure Dev Ops.
* Created the pipeline using BICEP and YAML to ensure smooth deployment across all the environments.
* Created a ADF pipeline as well which used the self-hosted integration runtime.
* Developed backend code to connect to the database using Entity Framework core.
* Wrote the repository and service layer to implement the business logic for the application.
* Used the Blazor library to implement the UI for the application. Used the Mud Blazor library to further enhance the UI.
* Used Bulk insert library to ensure fast data saving go the database.
* Managed the daily standup and change management process with team members.
* Conducted weekly presentations to the business stakeholders. Was the single point of contact for al technical items with the client technical team.
* Used RBAC to lock down the application and all Azure resources.
* Created various data ingestion pipelines in Azure Data Factory.

**Environment:** C# 11, .NET Core 7.0, ASP.NET Core, Blazor, Mud Blazor, Azure Blob Storage, Azure DevOps, Azure Key Vault, Azure Monitor, Azure SQL, AutoMapper, Entity Framework Core, Azure Data Factory

**Envoy Global LLC. |Chicago, IL| April 2018 – May 2023**

Software Architect

**Project: Legal Portal – Legal workspace where the attorneys and paralegals login and work on their case load**

* Architected a new system to handle multi-tenant databases. Each customer has their data in their own Azure SQL database, possibly in different Azure data centres, but the legal team can access that data seamlessly using their portal.
* Designed and developed a message queuing system to handle large loads using the Azure Service bus.
* To reduce build and load times designed the Angular front end using the micro front end architecture.
* Ensured that the Angular frontend used NGRX for state management.
* Architected and designed the backend API using micro services using ASP.NET Web API.
* Migrated the old WCF endpoints to Web Api.
* Used Entity Framework to design the database later and connect to SQL Server.
* Abstracted out the user input forms using a small lightweight CMS system, enabling additions to be made to forms without major downtime.
* Designed a SSO system that enabled the user to login using major authentication providers or our company’s home-grown system. Supported pin generation using authenticator apps as well as email.
* Designed and put into place application controls showcase so that developers could reuse controls that ensured a common theme and look and feel across the system.
* Incorporated the Redis cache as well as a static cache to speed up data access.
* Designed the system to use role-based access controls to ensure that relevant data is only seen by folks who needed to see it.
* Redesigned and updated the old desktop application written in WPF
* Designed processes to ensure that production data is obfuscated when replicated to the lower environments.

**Environment:** C#, .NET Core, ASP.NET Core, Web API, Jira, Confluence, Typescript, Angular 13, NGRX, Angular Materials, Bootstrap, Azure Service Bus, Azure Functions, Azure AI Services, Azure Blob Storage, Cosmos DB, Redis cache, SQL Server 2019, Ninject, WPF, WCF, Entity Framework, HTML5 and CSS

**Project: Automation Center – Using Robotic Process Automation to automate the general of immigration case materials based on customer and legal data**

* Architected and designed a common database structure to handle multiple bots logging transaction data.
* Architected the bot standard architecture to create bot with highly reusable modules cutting build times by almost 50 percent.
* Architected a automated payment processing bot that extracted payment information from scanned pdf files and then updated the payment portal. The bot was intelligent enough to credit any extra money to the clients credit account for future payments.
* Designed and prototyped a connector module that enabled connecting to third party services a breeze.
* Incorporated Azure AI to generate form content based on word templates and user data.
* Created the model to quickly estimate effort for Automation centre of excellence projects.
* Architected a connector module which enabled web logins to government immigration websites.
* Used Entity Framework to design the database later and connect to SQL Server.

**Environment:** C#, .NET Core, ASP.NET Core, Web API, Typescript, SQL Server 2019, UiPath RPA software and power automate, payment processing, WCF

**Project: Customer Portal – B2B web application for the HR and Foreign nationals to manage and apply for US and Global visas**

* Responsible for managing a team of 12 developers both onshore and offshore focused on developing and fixing new features in the Envoy Immigration Platform Customer Portal
* Designed and developed the APIs for the customer portal using ASP Web API and WCF
* Created a desktop application using WPF to present information received via WCF.
* Hands on development using C# and Angular 12, creating application features using Angular on the front end and Web API on the backend.
* Incorporated Azure AI for real time document data extraction from passports
* Created Azure functions to check the dead letter queue on the Azure Service Bus and reprocess dead messages and pushed them to the desktop using WCF and windows services.
* Used Entity Framework to design the database later and connect to SQL Server.
* Architected a CMS system to process the government immigration forms and rendering engine to display those forms as HTML
* Architected a CMS system to display XML based questionnaires and tools to handle versioning

**Environment:** C#, .NET, ASP.NET, Blazor, Web API, Jira, Confluence, Typescript, Angular (8,12), Angular Materials, Bootstrap, Azure Service Bus, Azure Functions, Azure AI Services, Azure Blob Storage, Cosmos DB, Redis cache, SQL Server 2019, WCF, HTML5 and CSS

**Cars.com |Chicago, IL| December 2015 – March 2018**

Software Architect

* Responsible for managing a team of developers focused on building enterprise systems to achieve a high degree of automation.
* Transitioned the team from Kanban to the Lean Agile methodology.
* Responsible for coordinating with business leaders across functional groups to identify opportunities for achieving efficiencies by integrating with existing or building new systems.
* Responsible for reviewing the architecture and design of systems and pitched in by writing code when needed.
* Introduced the use of JavaScript frameworks like Node.js, Angular 2, jQuery and Bootstrap when building new system
* Built the chatbot connecting Slack to ServiceNow and using Node.js to build the REST API.
* Used Angular 2, Node.js and SharePoint to build the purchasing and other web applications.
* Pushed for the design and development of conversational interfaces (chat bots) from Slack and Skype to ServiceNow, SharePoint and custom applications.
* Architected and designed an enterprise API layer which allowed different systems to connect and share data seamlessly using WCF.
* Architected a desktop application using WCF to present the information in a disconnected fashion on the users’ desktop.
* Developed the roadmap of moving applications from OnPrem to Azure
* Developed connectors to exchange data with Greenhouse, ADP, Salesforce and Peoplesoft
* Developed a proof-of-concept machine learning application using a linear regression model running on Azure ML

**Environment:** Office 365, SharePoint 2013, InfoPath, C#, .NET, ASP.NET, Jira, ServiceNow, Confluence, JavaScript, Node.js, Angular.js, Bootstrap, WCF, WPF, CSS, jQuery, Entity Framework

 **Cars.com |Chicago, IL| August 2010 – December 2015**

Lead Developer

* Oversaw the migration from SharePoint 2010 to SharePoint 2013
* Improved the speed of an existing ticketing system written on the SharePoint platform.
* Design and developed the Legal Contract management system used @ Cars.com on SharePoint 2013.
* Responsible for identifying upcoming technologies and incorporating them into our technology stack including Node.js and Angular.js
* Coordinated with the QA team to develop automated test suites
* Design and Developed the Cars.com Intranet using SharePoint webparts
* Developed web services using REST and SOAP using ASP.NET Web API and SharePoint
* Rearchitected and refactored the code of the purchasing system to use Angular.js
* Along with architectural tasks, also responsible for Lead development activities like hiring, mentoring, sprint planning etc.

**Environment:** Office 365, SharePoint 2013/2010, InfoPath, C#, .NET, ASP.NET, Jira, JavaScript, Node.js, Angular.js, Bootstrap, CSS, HTML5, jQuery, WCF

 **DevCare Solutions |Columbus, OH| August 2009 – May 2010**

Team Lead

* Involved in collecting requirements from the business users and technical groups.
* Involved in design of the various applications and coordinating with other technical groups to ensure compatibility with their design goals.
* Created Web services which are consumed by Oracle applications.
* Creation of new database tables to support the enhanced functionality needed by the application.
* Created stored procedures to speed up access to the data
* Identify improvements to current systems to ensure reduced redundancy,
* Trained the IT personnel so that they can maintain the application in the future.
* Wrote windows services to synchronize data across various systems on a regular basis.
* Designed and developed web parts in SharePoint for data entry and data maintenance.
* Designed and developed InfoPath and ASP.NET form approval workflows for the new business processes.
* Implemented AJAX web parts in SharePoint 2007 using JavaScript and jQuery
* Involved in the design of the security approach being used in the SharePoint applications.
* Used jQuery to make Ajax calls and implement some UI enhancements.

**Environment:** SharePoint 2007, SharePoint 2010, InfoPath 2007, C#, .NET, ASP.NET, Subversion, WPF, WCF, CSS, HTML5, jQuery

**DevCare Solutions |Columbus, OH| June 2009 – July 2009**

Senior Developer (Consulting)

* Responsible for the design and implementation of the inventory management screens for a way finding application for Ohio State University
* Used the dojox ui library for the various form elements on the inventory screens
* Dojo was also used for making AJAX calls to [ASP.NET](http://asp.net/) web services
* Implementation of the [ASP.NET](http://asp.net/) services to support the functionality and data needed on the inventory management screens.

**Environment:** C#, .NET, [ASP.NET](http://asp.net/), Dojo, JavaScript, AJAX, [ASP.NET](http://asp.net/) Web Services, WCF, Subversion, CSS, HTML5, jQuery

**Accenture /India| Jan 2008 – June 2009**

Team Lead

* Involved in the design of the system and explaining the design to the business users and GT IT Team.
* Involved in estimation and task tracking on the project.
* Implemented a custom search page which sports connected web parts.
* Used the Atlas Ajax toolkit and controls for preventing page post backs.
* Implemented a Taxonomy tree control with ability to add, edit and delete nodes. Most of the functionality was developed in JavaScript to make the speed of rendering and displaying the tree fast.
* Wrote web services which exposed the business layer functionality for consumption by VSTO plugs-ins for migration and new content creation.
* Implemented a validation framework using JavaScript to improve the user experience.
* Implemented a saved search web part which allowed the user to save searches. Also created the search scopes.
* Implemented timer jobs which updated stored metadata information in the document libraries based on changes to metadata in a SQL Server database.
* Designed and developed item level security functionality which was applied to individual document library items.
* Developed custom workflows using ASP.NET, WCF, InfoPath and WF.
* Wrote event receivers which synchronized data across various document libraries.
* Was responsible for code reviews and mentoring of junior programmers.
* Implemented Singleton and factory design patterns in application design.
* Used VSTS for unit testing of code.
* Integration of Longitude and MOSS Search into the application.
* Customization of the Longitude Search parts using XSLT.
* Involved in writing stored procedures, SQL queries, triggers, scheduled jobs for use in different modules of product.
* Designed and developed a VSTO based content migration system using Excel, SharePoint and web services.
* Interacted with the testing team for the complete testing of the product.
* Was responsible in supporting the GT IT team in final rollout of the application to production.
* Involved in creating an automated content migration system which was used to migrate content from old system to SharePoint.
* Created a plug-in using VSTO for Excel. The business user could provide mappings in Excel and provide it to the system. The automated system would then use the excel document created to migrate the documents to the new system.
* The system could be set up to migrate at a scheduled time and produced reports for auditing.
* The system could also apply metadata changes and reports statistics about the rate of migration.
* Also created a soft asset which allowed the IT admin to collect information from business users for migration.

**Environment:** Microsoft SharePoint 2007, Windows Workflow Foundation (WF), InfoPath, C#, .NET, ASP.NET, JavaScript, ADO.NET, Enterprise Library, SQL Server 2005, Visual Studio.NET 2005, UML, XML, Web Services, VSTO 2005, Win Forms, MS Excel 2007, Team Foundation Server, VSTS for unit testing

**Honeywell |India| January 2005 – September 2007**

Lead Developer

* Lead a team of developers building a process automation framework to control industrial machinery.
* Involved in estimation and task tracking on the project.
* Created a web and desktop interface to connect with and set the parameters of the machinery.
* Collaborated with a Honeywell US team in building a suite of products to control industrial water mains plants.
* Used MFC for the desktop application and ASP.NET Web forms for the web interface.

**Environment:** ASP.NET, C#, COM, MFC, Visual Sourcesafe

 **Infosys |India| March 2004 – December 2004**

Team Lead

* Lead a team of developers working on internal Microsoft Projects
* Worked on an Antipiracy suite of applications for Microsoft.
* Used COM+ to make host components that could be called by both desktop and web clients.
* Developed a financial tracking application for Microsoft finance department using C# and MS Access
* Developed databases in SQL server for both OLTP and Analysis services.

**Environment:** ASP.NET, C#, COM+, SQL Server, MSAccess, Visual Sourcesafe

**Mahindra British Telecom |India| August 2002 – February 2004**

Software Engineer

* Worked at the Microsoft India centre in Hyderabad to develop and test components for the Visual J# swing components.
* Used C# and an internal library to develop and test swing components using the java swing specifications.
* The controls had to be developed without using any existing java controls.

**Environment:** VJ#, C#, MAUI Library

**Intigma |India| July 2001 – July 2002**

Software Engineer

* Developed a product that was used to extract data from scanned paper catalogues and then create a digital library of tools mentioned in the catalogue.
* Worked as a developer building the business layer using COM components.
* Created a client server application consisting of a desktop based MFC application and a disconnected server using .NET remoting and COM components to host a server.

**Environment:** C, C++, VC++, MFC, COM/DCOM, ATL, Visual Studio 6.0, Visual Source Safe, Oracle 8i

**New Economy Venture Group |India| July 1999 – July 2001**

Software Engineer

* Developed a client server application using VC++, COM and ATL
* Developed browser helper objects which sat in IE and would render on shopping sites.
* The product would allow a user visiting an ecommerce site in the US with sites in India.
* Developed the BHO which rendered the UI in the browser and developed the ATL COM backend to retrieve the data and make the comparison.
* Coded a bot that would web scrape data from ecommerce sites and build a database of products.

**Environment:** C++, IE Browser Helper Objects, VC++, COM, ATL, Visual Studio 6.0, Visual Source Safe, MS Access

 **EDUCATION**

* Masters in Computer Applications (MCA) from Pune University, India – 1997-2000
* Bachelor of Electronics (B.Sc.) from Pune University, India – 1993-1997

 **Professional Certifications**

* Neural Networks and Deep Learning Certificate from Coursera
* IC Agile Certified Professional - Agile fundamentals
* Microsoft Certified Professional Developer for Enterprise Applications
* Microsoft Certified Technical Specialist for Web Applications
* Microsoft Certified Technical Specialist for Windows Applications
* Microsoft Certified Technical Specialist for Distributed Applications
* Microsoft Certified Technical Specialist for Microsoft SharePoint 2007 development