Shishupal Kumar

AI-Driven Cloud Architect | GenAI & .Net ,C#,Azure Specialist | Full-Stack Innovator Bengaluru, India | +91 9731724632 | Shishupalk@yahoo.co.in MCA | Credly Certification | DBA/PhD in Data Science AIML/Gen AI (Rushford) | PGP-DSBA (Great Learning)



PROFESSIONALSUMMARY

A results-oriented technology leader with deep expertise in **Generative AI**, **AI**/**ML**, **Data Science**, and **Microsoft Azure Cloud & .NET ecosystems**. Proven track record of Architecting and delivering scalable, secure, and intelligent solutions that fuse cutting-edge AI capabilities with enterprise-grade cloud infrastructure. Adept at driving innovation through **LLM orchestration**, **prompt engineering**, and **RAG architectures**, while simultaneously leading full-stack development and cloud modernization initiatives.

Core Competencies

- **Generative AI & LLMs**: RAG architecture, LLM orchestration, prompt engineering, Azure OpenAI integration
- AI/ML & Data Science: Classification, regression, clustering, SMOTE, ensemble models, ANOVA, statistical modeling, decision science
- Python & Data Tools: Pandas, NumPy, SciPy, Seaborn, Matplotlib, Statsmodels, Scikit-learn
- **Cloud Architecture (Azure)**: Azure App Services, Azure Functions, AKS, Azure SQL, Azure Storage, Azure AD, Azure DevOps
- .NET & Full-Stack Development: ASP.NET Core, C#, MVC, Web API, Entity Framework, React, PowerShell, .NET Core migration
- **DevOps & CI/CD**: Automated pipelines, Git, Jira, containerization with Docker & Kubernetes
- **Security & Governance**: Role-based access, data protection, compliance, secure coding practices
- **Leadership & Strategy**: Technical risk assessment, project estimation, team mentoring, talent acquisition, stakeholder engagement

Key Achievements

- Spearheaded end-to-end migration of legacy PowerShell scripts to modern .NET Core for Honeywell
- Architected and delivered **portal submission platform** for Multichoice General Entertainment
- Designed and implemented **LibreOffice-based reporting solution** for GE Healthcare
- Led **cloud migration** of on-prem applications to Azure, enhancing scalability and reducing costs
- Built **CI/CD pipelines** using Azure DevOps for seamless deployment of .NET applications
- Developed microservices architecture with Docker & AKS for high-performance cloud workloads
- Achieved 30% database performance improvement through advanced tuning and indexing strategies

☐ Current Responsibilities

- Collaborating with clients to design POCs and propose end-to-end Integrated AI/cloud solutions
- Leading architecture decisions, technology stack selection, and execution methodologies
- Designing secure, scalable Azure solutions with integrated AI/ML capabilities
- Driving full-stack development using React, ASP.NET Core, and C#
- Mentoring cross-functional teams and guiding technical leadership across projects
- Staying ahead of trends in GenAI, cloud computing, and modern software engineering

WORK EXPERIENCE

•	May 2025 – Till Date	1	Principal Solution Archite	ct	AndorTech AndorTech
•	Aug 2024 – Apr 2025	T	Senior Technical Architec	t	Tata Elxsi
•	July 2022 - Nov 2023	1	Senior Technical Architecture	ct	Persistent
•	OCT 2021 - June 2022	1	Technical Architect	1	Visionet Systems
•	Feb 2013 - OCT 2021		Technical Lead		HCL
•	Nov 2011 – May 2012	-	Senior Associate	-	Sapient
•	June 2010 - Feb 2011		Technology Specialist		Dell Perot System
•	Nov 2009 – June 2010		Consultant	-	Virtusa
•	July 2006 - Nov 2009		Sr. Software Engineer	-	Satyam Computer Services Ltd
•	June 2005 - March 2006	5	Software Engineer		Aryan Solutions
•	Aug 2004 – June 2005		Executive		MACS Info Solution

AWARD AND RECOGNITIONS

- Client Appreciation from multiple accounts: Citi Bank, Tesco, HCL
- Consistent Record and one of the Best Student Recognition:

1-year Great Learning PGP-DSBA Program for Machine Learning, Data Science and Analytics from Word famous Institute.(<u>Data Science</u>, <u>Business Analytics Course [Learn from UT Austin Faculty]-Great Learning</u>)

EDUCATION

- Pursuing Phd/DBA in Data Science (AI ML /Gen AI)— Rushford Business School, Switzerland
- Completed Master of Computer Application (MCA) from PES College Of Engineering, Mandya, Karnataka
- Completed Bachelor of Science Physics Hons, A.N. College, Patna

PROJECT DETAILS:

Current Project: Honeywell AMT / AndorTech

Technologies: Azure ,C#, Git, Azure Dev ,Confluence,Windows PowerShell

Role: Architecture/Design / Team Lead and Development(Coding in .Net Core , C#)

Understanding client existing infrastructure, requirements and purposing solutions with

selection of appropriate technology stack and cloud interaction.

Complete project Architecture / design.

Creation of POC to client presentation.

End to end design of the Project HLD, LLD.

Creation of CI/CD pipeline

Performance tuning and its strategies set.

Selection of Entire Team and training to Architect, Project Manager, TL/PL and development

team.

Mentor, code review.

Developing one important module CreateEsis which will download all required Migration documents and too;ls from Aspera(Sharepoint location) to Neutral Node (Virtual Machine).

Descriptions: This is a complete Migration project from legacy platform Windows PoweshellScript to

niche technologies .Net Core , C# for better technology support and security of applications.AMT is Advanced Migration Tool which will start with Customer Migration

request and complete the whole migration process.

Project: GE Portal Submission Project / TataElxsi

Technologies: Azure ,Kafka ,C#,React,PostGreSQL , Git, Azure Dev OPS/Jira, AI/ML , Generative AI

Integration

Role: Solution Architect/Technical Architect/Design Development

Understanding client existing infrastructure, requirements and purposing solutions with

selection of appropriate technology stack and cloud interaction.

Working closely with Presales team, providing all technical inputs and helping to SOW sign

off as a Solution Architect.

Complete project Architecture / design.

Creation of POC to client presentation.

End to end design of the Project HLD, LLD.

AI/ML and Gen AI integration with project for Automated service support.

Creation of CI/CD pipeline

Performance tuning and its strategies set.

Selection of Team and training to Architect, Project Manager, TL/PL and development team.

Mentor, code review.

Descriptions: This is a Portal development project for submission of contents for Multichoice General

Entertainment.

Producers / Users can Register and upload their contents, videos which will go to multiple

stages of Approval as per Multichoice hierarch of Approval.

Once Approved that Producer will be selected for their program.

After development of first stage 2nd stage will integrated with AI/ML Gen AI support for

service and support module.

Project: T&M for Azure iPaaS migration Project / Persistent

Technologies: Azure ,C#,SAP,SalesForce,Sitecore,SQL Server , Git, Azure Dev OPS/Jira

Role: Azure Architect/Solution Architect/Design Development

Understanding Client existing Infrastructure, Requirements and proposing Solution, Developing Solution using Azure ,Angular and Visual Studio .Net, Writing Azure Functions, App Services Integrating and publishing it all in cloud. Configuring all configuration settings, Pushing and Managing Code in different environments, Doing and taking care all builds and deployments and Post deployments support.

Client and Team Interaction daily in Scrum calls, Task management in Jira, Project design Azure and Database, API, POC, Coding and code review, and Leading the Development team.

Descriptions: This is T&M for Azure iPaaS migration project for our Australia client for all Car and

Motor cycle sales/Automobile domain.

Existing application Front End is Sitecore / Angular, Business logic is in Azure (Azure

Functions)

Data is coming from SAP and Other data sources. Using Azure functions and other Azure

service need to integrate with Salesforce.

Current Project: DMU Phase2.0 / Persistent

Technologies: Unqork,Node, SQL Server , Git, ,Azure ,Dev OPS.

Role: Technical Architect/Solution Architect/Design Development

Understanding Client existing Infrastructure, Requirements and proposing Solution, Developing Solution, Configuring all configuration settings, Pushing and Managing Code in

different environments, Doing and taking care all builds and deployments and Post

deployments support.

Client Interaction daily in Scrum calls, Task management in Jira,

Project design: Frontend: Unqok Backend: Node.

Data Interaction from Database through API.

POC, Coding and code review, and Leading the Development team.

Descriptions:

Data Management Utility (DMU), This project is developed in Unqork using module / workflow and Azure for our client to help them in their business processes of Insurance for all data management in a glance.

It has dedicated dashboard and multiple models for Search and getting the customized result set.

General Contact Management:

Search Contacts Result , Table Edit Contacts , Add New Contact

Manual Clearance Tool:

Search Customers, Result Table, Clear Search, New company addition

Create submission for various products, Edit Submissions

Relationship Management Tool (Account Group Management):

Search Account Group, Display Results, Create New Account Group

Modify existing account group, View account group details

Customer Info Screen

Account Info, Account Policies, Account Contacts, Account Locations

Policy Info, Policy Contacts, Policy Locations, Policy Details Search

Unqork is a no-code platform empowers organizations to rapidly build and effectively maintain sophisticated digital solutions without writing a single line of code.

Lower costs and scale with confidence using a fully managed, secure-by-default platform as a service (**PaaS**). Unqork ExpressCloud comes out-of-the-box with security, flexibility, and scalability, so we can focus on the business features that matter.

Project1: Microsoft 365 Apps / Visionet

Technologies: VS 2019 , Asp.Net 4.7.2 , C#, JavaScript, JQuery, JSON, LINQ, SQL Server , TFS, Microsoft

Team (Microsoft 365 Apps), Microsoft VIVA, Azure Dev OPS, CRM, Power Apps

Role: Technical Architect/Solution Architect.

Understanding Client existing Infrastructure, Requirements and proposing Solution, Client Interaction, Task management, involved in design, POC, Coding and code review, and

Leading the Development team.

Descriptions: Developing Microsoft 365 App and add to Microsoft Team

This project is to develop Microsoft 365 App for our client having all graphs and may

features and add this developed App to Microsoft Team.

Project2: RRS / HCSC

Technologies: VS 2017, Asp.Net 4.7.2, Sitecore, C#, JavaScript, JQuery, JSON, LINQ, SQL Server,

TFS, Azure Dev OPS /Jeera,Log4Net.

Role: **Technical Architect/Solution Architect**.

Requirements gathering analysis, Client Interaction, Estimation, Task management, design,

POC, Coding and code review, and Leading the Development team.

Descriptions: Retail Renewal System (RRS)

1. Retail Renewal System (RRS) is an application which creates renewal and/or discontinuance letter extracts for System80 members.

- 2. The discontinuance letter informs the member their current policy is being discontinued and directs them to a website where they can shop for new coverage. The renewal letter informs the member their current policy will renew and provides their current premium rate and next year's estimated premium rate.
- 3. Every year RRS Team receives Membership and Actuarial files from System80 team. The Membership file contains all active and lapsed members and those terminated with specific reason codes.
- 4. The Actuarial file contains all active members along their current premium rate and estimated premium rate for next year.
- 5. RRS Team places those files in FTP folders and imports the data and generates the extraction files to be sent to print vendor R.R. Donnelley (RRD).
- 6. R.R. Donnelley will load the letter extract file and generate and mail the letters to the members.

Project3: eASSeT / HCL

Technologies: VS 2017, Asp.Net 4.7.2, C#, JavaScript, JQuery, Ajax, Entity Framework, LINQ, SQL Server

Tortoise SVN, Bugs Tracker, Log4Net, Azure DEV OPS, Angular

Role: **Technical Architect/Solution Architect**.

Requirements gathering analysis, Estimation, Task management, Design, Coding and code

review, and Leading the Development team.

Descriptions: eASSeT- Is a **Transition Management Tool.**

eASSeT-Tool is for managing transition activities starting from due diligence to transition

completion. It has multiple modules interacting with each other.

Solution Generator module of eASSeT will help User to create Transition solution

document. It is used to provide content for Transition solution in word and Power point.

All HCL users have privilege to use this module to create Transition Solution Document.

Project4: Digital Applications / HCL (Cambridge, UK)

Technologies: C#, Sitecore, ASP.NET4.5, WPF, Web Service, SQL Server TFS, Service One

Monitoring Tool: Nagios, Pingdom.

Role: Requirements gathering analysis, Involved in designing the solution and documenting all

process. Worked in role of Tech Lead and BA (Transition Management).

Descriptions: My Client ,ARM is in business of Intellectual property.

It designs the intellectual property of chip that is used by multiple clients like Intel etc. They are managing their business through multiple sites/applications like

Arm.com, Developer.com.

User can interact applications after Registering on their sites through Sign On.

It has multiple applications for multiple purpose like for End User Interaction ,

Internal Technical Developers Interactions, Support team.

Many Applications content are managed in CMS Sitecore.

This is a Transition cum Enhancement Project Managed and lead by me since beginning till Live involved all stages of Transition: Planning, Absorption, Replication,

Parallel Run and Go Live.

Project5: Citi Chemistry New / HCL

Technologies: VS 2013,2010 Sql Server 2012,ASP.NET4.5,C#, Web Service, WPF,SSRS, TFS,Log4Net

Role: Tech Lead: Requirement Gathering, Design, coding and Managing Team.

Descriptions:

This project is related to the management and development of an application which

validates the SWIFT message, proprietary massages & files. It repairs these massages

& files if they are incorrect in format.

Project6: BCG eLearning Phase 1 Development / Sapient

Technologies: ASP.NET, C#, Web Service(Saba Services)SQL SERVER 2008,Tortoise SVN

Role: Track Lead/Associate Architect

Descriptions: BCG world's leading advisor on business strategy. It also provides learning facilities to

their clients. They have live, Virtual and different kinds of strategically courses.

BCG Portal maintains these all. We are responsible to build a portal that will integrate all the learning capabilities, courses across various 3rd party vendors to one place

It integrates the BCGs inbuilt learning courses and various 3rd party courses provided

Project7: Venus / Satyam Computer Services Limited, Tokyo Japan

Technologies: C#, Visual Studio 2008, ASP.20, WCF, WPF, EL 3.1, SQL Server 2005 and Visual Team

Foundation Server (VSTS).

Role: Designer and Senior Developer.

Descriptions: Venus is being developed for our popular Insurance Company Client, ING Japan. This is

developed for their Financial Risk Management (FRM) department. Venus will retrieve data from their legacy (IBM Mainframe) via ETL process and display it in on Web Pages. It will also save ING FRM department daily transaction data and help them for their Analysis purpose. Venus also provides a more secure solution using a RDBMS, in

contrast to the flat files which are currently used.

My Data Science Contribution:

Project 1: ecommerce / DTH Company Customer Churn Analysis

Technologies: Python, Tableau, SQL

Role: Data Scientist / Data Engineer

Descriptions:

An E Commerce /DTH Company is having multiple online store where they can sell their products to multiple Customers online.

Customers are of different cities, Gender, Marital Status and using multiple mode of transactions (Cash, card etc).

Company is facing a lot of competition in the current market and it has become a challenge to retain the existing customers in the current competitive market.

From Cost point of view, It is always advisable to retain old customer instead to creating new Customer.

Predicting Customer behavior can help company to identify Customer Segmentation, Who are loyal Customer.

Goal (Need of Solving this):

Company wants to develop a most reliable and practical predictive model that will identify the Customer churn and its prediction.

With the help of this Model Company will get the idea cause of Churn and Churn distribution among multiple cities, Genders, Marital Status.

It will help company to Segment Customer who are more loyal and consistent.

Post Segmentation Company can run multiple campaigns and offers to retain their customer that in turn will increase company strength and profit.

We did All EDA, Data Cleaning Process, Clustering, Outliers Treatment and Null Values Treatment and then created multiple Models and compare their values (Accuracy, **Precision, Recall, f1**) which model is based.

- DecisionTree
- Bagging
- AdaBoosting
- GradientBoost
- RandomForest
- kNN Model
- LogisticRegression Model
- Train Naive Bayes
- Linear Discriminant Analysis
- LogisticRegression
- SMOTE

After that forecast best result. Advised to Marketing and Customer services what are the possible steps take to retain the customer.

Outcome: After cost Analysis we find our solution can help company to retain at least **5000 Customers** from Different Cities and will **save Revenue of \$139M Assets**.