**KUNALKUMAR M. LAD**

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**SUMMARY**

Proficient DotNet expert with over 16 years of leadership experience. Adept at fostering collaboration, refining business processes, and delivering robust system integrations. Known for clear communication, both verbal and through precise diagrams to effectively articulate complex technical concepts.

**TECHNICAL SKILLS**

* **ASP.NET, .NET Core, ASP.NET MVC, Entity Framework, C#, SQL Server, SQL Azure, MongoDB, CosmosDB, PostgreSQL, MySql**
* **Test-Driven Development (TDD), Domain-Driven Design (DDD), CQRS, SOLID principles, N-Layer, Clean Architecture, Repository Design Pattern, Microservices**
* Azure Kubernetes Service (AKS)**, Docker, App Services, Blob Storage, File Storage, Key Vault, Redis Cache, SQL Azure, Azure Serverless Functions, Azure Monitoring, Azure Data Factory, Azure Application Insight, Azure Data Lake, Azure Traffic Manager, Azure Service Bus, Azure Cognitive Search**
* **Amazon EBS, S3, RDS, Redshift, ElastiCache, AWS Lambda, SQS, AWS Key Management Service, CloudHSM, Server-Side Encryption (SSE), AWS Services**
* **JavaScript, jQuery, JSON, XML, TypeScript, CSS/CSS3, Angular.js, React.js, Vue.js, Bootstrap, HTML/HTML5,**
* **Xunit, NUnit**
* **Cross teamwork experience - Flutter, iOS, PHP Magento, Android, Xamarin, DotNet MAUI, Java, PHP Laravel**

**PROFESSIONAL EXPERIENCE**

**TechLead at IEHP (Domain – Healthcare) Jul 2024 – Present**

**Location: CA, USA**

* Initiated and led the design of.NetCore and Clean Architectures, incorporating Onion Architecture and SOA models for a robust data hub solution.
* SaaS applications using Kubernetes (AKS) and Docker in Azure. Configured auto-scaling in AKS and leveraged Azure Monitor and Application Insights for performance tracking and monitoring, significantly improving application scalability and responsiveness.
* Involved in Database design with SQL Azure, used index, views, SQL functions, Sql stored procedure to achieve the results from the database. Implemented the CQRS design pattern, enhancing system performance and scalability.
* Played a key role in requirement gathering, and system design, leading through to project deployment and client support. Provided technical leadership that ensured alignment with business goals and successful project outcomes.
* Rabbit MQ, Masstransit used for the notification purpose on this project. User Publisher and Subscriber model for the PUB SUB for the topic dispatch. Used Azure Blob Storage, Azure File Storage, and Azure Key vault for the project.
* Azure Service bus has been utilized for the email notification purpose which ensures send email notification. Azure service bus Pub/Sub strategy has been implemented.
* Optimization of SQL Server databases and achieving a 30% increase in query performance. Created queries that provide multiple table outputs that perform and reduce server trips.
* Worked with Azure Cosmos DB to design and manage globally distributed database, optimize queries and handle data efficiently.
* Worked with serverless services (Azure Functions) to create and set up HTTP triggers, using Application Insights for monitoring and VSTS for load testing the applications.
* Environment: .NET Core 8.0, Angular, C# 12.0, SQL Server, Rabbit MQ, Mass Transit, Azure Devops, CI/CD, XUnit, Visual Studio 2022, Azure Cloud, Azure Service Bus, Azure Kubernetes Service (AKS), Git, WebAPI, SQL Stored Procedures, WebAPI, JWT, Clean Architecture, Agile, SSRS, SSIS, Cosmos DB, Azure Serverless functions

**Senior Team Lead at Rishabh Software Pvt Ltd Dec 2021 – May 2024**

**Client: Merchant Financial (Domain – Finance - US)**

**Location: India / NJ, USA**

* Successfully re-engineered a legacy application by designing a new database architecture from scratch, incorporating system design concepts to enhance performance and scalability. This modernization effort laid the foundation for more efficient data handling and system flow.
* Involved in SQL Azure DB design, SQL table, stored procedure, index, view, SQL function creation and modification. Used C# 7.0 for develop the code for WEBAPI and Service classes. Coding practices implemented on Angular side and C# side. Follow SOLID principles.
* Azure's cryptography functionality and hashing algorithms and Azure Key Vault has been implemented. Used MongoDB for maintaining the archival data. Used Kafka for sending notification from the DB and show them on application. Kafka borker, producer approach has been implemented.
* Worked with Azure Cosmos DB to design and manage globally distributed database, optimize queries and handle data efficiently.
* Worked with Azure Kubernetes Service (AKS) to deploy, manage, and scale containerized applications.
* Utilized Application Insights to monitor application performance, user interactions, and operational health, facilitating rapid diagnostics and improving user experience.
* Used Azure Service Bus to send email notifications, ensuring reliable delivery.
* Developed Azure Functions for serverless applications, using HTTP triggers and Application Insights for monitoring.
* Orchestrated the seamless migration of an entire project from on-premises infrastructure to Azure cloud, including web applications, databases, and CRON jobs.
* Environment: C# 7.0, .NET Core 6.0, Angular.js, SQL Azure, Entity Framework, Azure Data Lake, Azure Data Warehouse, Azure Key Vault, Cryptography, JWT, SOA, WebAPI, TypeScript, Azure Kubernetes Service (AKS), Azure Monitor, DevExpress, MongoDB, Docker, Azure DevOps, CI/CD, SSRS, Xunit, TDD, Agile, Azure DevOps, Cosmos DB, Azure Service Bus, Azure Serverless functions.

**Team Lead at Rishabh Software Pvt Ltd Apr 2019 – Dec 2021**

**Client: Team Lead at Pact Global (Domain – Insurance - UK)**

**Location: India**

* Led the design and architecture of the multi-tenant insurance application where we served different portals for different clients with the help of a multitenancy development approach. Used Repository pattern, Solid principle, Nunit testing framework for unit testing, C#, WebAPI, Angular for the frontend page design.
* Provided Level L3 client support, resolving critical post-production issues under high pressure. They implemented a dual-search mechanism using custom SQL queries for limited data and Azure Search for complex queries on large datasets, enhancing data retrieval efficiency. GDPR compliances have been implemented.
* Utilized Application Insights to monitor application performance, user interactions, and operational health, facilitating rapid diagnostics and improving user experience.
* I used Azure service bus for messaging, azure logic apps for automated workflow, Azure file storage for storing the document securely at Azure storage.
* Worked with Azure Kubernetes Service (AKS) to deploy, manage, and scale containerized applications.
* We implemented GDPR compliance for UK-based clients, including maintaining resources in the UK region and utilizing Azure Key Vault for secure configuration. This approach ensured adherence to data protection regulations while maintaining system integrity.
* Automated and Monitored Backend Operations: Automated critical backend workflows using Azure Functions triggered by time-based events, and employed Azure Monitoring tools to detect vulnerabilities and resolve issues efficiently. This automation reduced manual intervention and improved system reliability.
* Environment: C#, ASP.NET Core MVC, SQL Server, Angular, Bootstrap, Azure Blob Storage, Azure Serverless Functions, Azure Monitoring, NUnit, TDD, PowerShell, Azure Key Vault, GDPR Compliance, Azure Search, Azure Key Vault, Agile, Azure DevOps, Azure Service Bus

**Team Lead at Rishabh Software Pvt Ltd May 2019 – July 2021**

**Client: Team Lead at Taste Recovery (Domain – Real Estate)**

**Location: India/US**

* Requirement gathering, developer WebAPI, DB Design, coding with C#, .Net Core 3.0. Designed and developed microservices for various application aspects such as user management, notifications, and data processing. Utilized RESTful APIs for inter-service communication, and implemented service discovery and load balancing using AWS EKS (Elastic Kubernetes Service).
* Leveraged React.js for the frontend development, utilizing React.js components for the view layer and React.js state/hooks for managing view models. Integrated React.js components with microservices via API calls, ensuring a seamless user experience.
* Implemented performance optimizations in React.js, including useMemo and useCallback to optimize component re-renders. Used entity framework as ORM.
* Developed a Web API to facilitate communication with mobile clients, using AWS API Gateway for endpoint management. Configured rate limiting, authentication, and authorization to secure microservices and APIs. Mongo DB used for the getting the data from different source which are flat flie and saved it in MySql DB.
* Deployed .NET applications and microservices on AWS EC2 instances within Linux environments. Managed Kubernetes clusters using Amazon EKS to orchestrate containerized microservices, ensuring effective scaling and fault tolerance.
* Utilized AWS SQS (Simple Queue Service) for reliable and scalable messaging between microservices and mobile clients.
* Applied Intelligent-Tiering configuration in AWS for cost-effective data storage, with archival to Glacier based on predefined configurations. Streamlined storage and retrieval operations through microservices-based data processing.
* Technologies Used: C# 7.0, .NET Core 3.0, Flutter, React.js, MySQL, MongoDB, Entity Framework, Microservices, JWT, Web API, AWS API Gateway, AWS EKS, AWS SQS, AWS S3, AWS Glue, Agile methodology.

**Team Lead at Rishabh Software Pvt Ltd July 2017 - Apr 2019**

**Client: Health Align (Domain – Healthcare - US)**

**Location: India**

* Worked on a project with Time and material model using MVC 5.0, C#, SQL Server, JavaScript, and jQuery. Designed and implemented a robust architecture to enhance project efficiency.
* Successfully managed two different modules, leading a team of four members to deliver scalable and high-performance solutions.
* Implemented HIPAA compliance measures, including HTTPS/SSL/TLS for data encryption in transit and encryption for data stored in databases, ensuring the security and privacy of sensitive health information.
* Applied AWS Key Encryption algorithms to secure sensitive customer data, aligning with industry security standards. This approach significantly improved user data protection in a multi-tenant SaaS environment.
* Led the design and implementation of a high-availability SQL database architecture and Apache Cassandra for NoSQL requirements. Conducted thorough performance reviews of PL/SQL stored procedures and Cassandra queries, identifying and resolving bottlenecks, which resulted in a 40% improvement in processing speed for complex queries.
* Utilized AWS API Gateway for routing, authentication, and authorization, managing traffic with rate limits. Ensured seamless integration between the AWS infrastructure and the Cassandra database for optimized performance.
* Environment: MVC 5.0, C#, SQL Server, Apache Cassandra, JavaScript, HTML5, Bootstrap, AWS API Gateway, AWS S3, AWS Key Encryption, Agile, Jira.

**Module Lead at Milestone Internet INC Apr 2015 – May 2017**

**Client - Wyndham, Marriot, Remington (Domain – Hospitality - US)**

**Location: India**

* Created web application with help of ASP.NET Core 1.1, MVC 5.0, and SQL Server 2016. Used single sign-on for multiple products and user can log in once and used their subscription sites. Implement AngularJS in this application, enabling the development of highly interactive UI screens and improving user engagement.
* Integrated APIs from BingAds, Facebook, Instagram, and Google Ads to collect and monitor data on platform searches. This integration provided insights into traffic sources, including region and purpose, which informed strategic decisions for targeting and marketing efforts.
* Led a team of 6 members in the Unalytix project, utilizing Azure DevOps to manage the Kanban board and ensure smooth project execution. Used Agile scrum methodology for execute the project.
* Created database from scratch, DB design, indexing, and stored procedure. Optimized SQL Server databases, including stored procedures, to improve performance in high-transaction environments, achieving up to 30% reduction in query execution times.
* Deployed the project on Microsoft Azure, utilizing Azure Functions, CRON jobs, SQL jobs, windows services, and SQL Server 2016 for backend operations. Implemented security measures like SSO, ensuring secure user authentication and system integrity.
* Environment: Azure DevOps, C#, CI/CD, Agile Methodology, Azure Cloud Service, Azure Functions, ASP.NET Core 1.1, SQL Server 2016, SSO, Git, Façade Factory, Singleton, AngularJS, Azure DevOps, Agile

**Senior Software Engineer at Techgrains Technologies Pvt Ltd May 2013 - Jan 2015**

**Client - Bloomsbury (Domain – E-commerce – US & UK)**

**Location: India**

* Leveraged the open-source NopCommerce framework with ASP.NET MVC 4.0, C#, SQL Server, and Entity Framework to develop robust e-commerce solutions.
* Executed data migration using SSIS, successfully transferring data from a MySQL database to a SQL Server database while maintaining data relationships. Also performed data migration between different SQL Server databases.
* We implemented Entity Framework database-first approach for efficient database interactions and management. Applied dependency injection using Autofac to enhance application modularity and maintainability.
* They have integrated multiple payment gateways to facilitate diverse transaction methods. Deployed solutions across multiple regions using a single code base, ensuring consistency and scalability.
* Environment: C#, JavaScript, HTML5, CSS3, ASP.NET MVC, Entity Framework, NopCommerce, SQL Server, Visual Studio, Git, Autofac, On-premises infrastructure, Agile, SCRUM, Sprint Planning, Multiple Payment Gateways, SSIS (ETL tool).

**Software Engineer at Rigel Networks Pvt Ltd Sep 2011 – May 2013**

**Client - B2C Jewels (Domain – E-commerce – US)**

**Location: India**

* Utilizing the ASP.NET 3.5 framework with C#, SQL Server, and ADO.NET for e-commerce solutions, implementing server-side and client-side caching. Used ADO.NET for bridge connection with SQL Server.
* Write down SQL queries, views, SQL queries with different joins, SQL jobs, SQL triggers, SQL functions to achieve the desired result from the database.
* Used optimum level jQuery, javascript, css, and Bootstrap to achieve design for displaying the different dimensions and their features. Used caching mechanism for page load performance with static content.
* Maintained and developed an online diamond shopping website, optimizing queries and employing caching techniques to enhance site performance.
* Applied dependency injection using Autofac to improve application modularity and maintainability.
* Environment: C#, JavaScript, HTML5, CSS3, ASP.NET MVC, Entity Framework, NopCommerce, SQL Server, Visual Studio, Git, Autofac, On-premises infrastructure, Agile, SCRUM, Sprint Planning, Multiple Payment Gateways.

**Software Developer at JCN Technology Pvt Ltd Sep 2007 – Jan 2011**

**Client: KPMG (Domain – E-commerce - US)**

**Location: India**

* Salesforce Integration: Integrated Salesforce with custom applications, improving CRM capabilities and streamlining business processes.
* E-commerce Application Development: Developed and maintained e-commerce platforms, enhancing online sales and customer experience.
* Database Migration: Led successful database migrations, ensuring data integrity and minimizing downtime during transitions.
* Caching Implementation: Implemented caching mechanisms to optimize application performance and reduce load times.
* Worked on SOAP-based web services which would help decouple from the system and provide required data as and when demand.
* Technology Stack: ASP.NET Webforms, Web Services, Desktop Applications, SQL Stored Procedures, Database Design.

**EDUCATION**

Bachelor of Engineering – Information Technology (Gujarat Technology University – 2007)

**CERTIFICATION**

* Principles of Reactive Architecture
* Certified Scrum Master
* Master Project Management –PMP/PMI by Udemy
* Communication with emotional Intelligence by LinkedIn