



Name: Arun Sridhar

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- Experienced AI Architect and engineer with comprehensive knowledge of AI governance framework – NIST.
- Integration of Gen AI models into existing platforms.
- Experienced Software Architect and Technical Lead capable of leading and providing end to end architectural solutions for both small and large-scale initiatives emphasizing the strategy, governance, architecture, design road map and development on cloud. Experience in collaborating with customers for gathering and understanding both.
- Experienced Blockchain Developer – Ethereum and Hyperledger
- Experience in converting functional requirements into Domain Driven Design.
- Experience in implementing projects with 12 factor application
- Experience in Designing Container based solutions, both windows and Linux, matching with project requirements.
- Experience in design and development high availability architecture and cost optimization
- Experience in design and development of very highly traffic External customer using JS based UI and routing technologies.
- Worked closely with Cloud platform and engineering team understand and sort out gaps.
- Provide cloud architecture design consultancy for RFPs, created strawman document.
- Hands on experience in Azure Web App, Azure Kubernetes Service (AKS), Azure container registry, Azure functions, AWS Lambda.
- Hands on experience in Google Cloud Services Google Secret manager, GKE, Google pub sub.
- Hands on knowledge of Restful API, Rpc, ProtoBuff, WCF.
- Hands on knowledge of all data structure algorithms and ability to re-engineer existing ones based on the requirement. Design Patterns: Mediator pattern, CQRS Pattern, Repository pattern, Observer pattern, Unity Dependency injection framework.

Gen AI Programming	Langchain , Langgraph , FastAPI
Gen AI Models	Azure Open AI(Gpt 3.5, 4o), Llama, Huggingface
Programming	C# dotnet core 3.1, 2.2, VB.net, ES 2015, node.js, python 3.0 , React, Angular, Handle bars, Mustache
Cloud	Azure (MS Certified), Google Cloud, Bluemix and Pivotal, AWS, Serverless
Bundling	Gulp, Webpack
OR/M	Entity Framework, Entity Framework core, nhibernate, Dapr, Prisma
BackEnd	WCF, REST APIs , RPC, gRPC, Protobuff APIs, Http/2
Messaging	IBM MQ, RabbitMQ, Google pub sub, Azure Service Bus
Service Mesh	Steel toe, istio
Repository	Github, TFS, gitLab
Database	Postgres SQL Oracle, SQL Server, Cosmos DB, CouchDB, LevelDB
Test	MoQ, Mocha, Chai, Jest

Certifications

1. Certified Azure Architect: AZ-303 & AZ-304, AZ-203
2. Certified Azure AI Professional: AI -900
3. R3 Corda Certified Developer
4. Certified Hyperledger Practitioner
5. ITIL Certification
6. AHIP Part A and B

Projects

August 2022 – Till date

Role: Solution Architect

End Client: Banking client, Bangalore India

Research Assistant – Internal Chatbot

Research assistant is an internal chatbot application used by Product owners, designers and senior engineers to search internal document sources like Jira, Northern lights, Figma, gitlab. The documents are diverse in nature – JIRA tickets, gitlab code, The documents are fetched from search API and fed as RAG sources from the to the LLM.

- Leading the architectural design and implementation of a robust and scalable Generative AI platform, defining the technology roadmap and strategy.
- Identified the embedding model.
- Identified the various actors and designed & developed langgraph, langchain based conditional communication network.
- Designed and lead development of multiagent architecture with python as programming language.
- Designed and implemented compliance, input and output guardrails AI framework
- Identified different domains and created different RAG sources for them.
- Evaluated various framework and identified BERT model from Hugging face to calculate Hallucination score and created report with them.
- Designed accurate prompts and developed n-shot prompt based on the requirements.
- Implemented Redis cache based on need.
- Containerized the application and hosted it.
- Created prompt monitoring and telemetry pipeline using Langsmith.
- Deploy LLM the end point and hosted the chat bot in react based application.

Connected Finance - Internal Chatbot

Connected finance is an internal chatbot application used by engineers and architects to search internal code bases. The api is designed to perform semantic internal search of git repositories. The customer repository is huge and has code of many applications developed in various technologies like Java, node.js. It also has various design images which are maintained in github

- Designed the data collection pipeline, Inference pipeline and Prompt monitoring pipeline.
- Created intelligent document processing model to integrate with github using Azure open AI.
- Containerized the application and hosted it.
- Created prompt monitoring and telemetry pipeline using Langsmith.

Technology: Azure Open AI, Python (Backend), React(UI) , Redis,PostgreSQL

January 2021- June 2022

Role: Solution Architect

End Client: International Baccalaureate Organization , Bangalore India

Legacy to node.js and Azure movement

This project is to migrate the old java based apis into node.js and deploying the code to azure

- Working with the designer team to understand the LLD documents.
- Was involved making to choose ORM for the Postgresql DB – Sequelize vs Type vs Prisma.
- Created node.js package for reusable items like logging, DB Access.
- Created for multiple apis for various features, including creating ReTry mechanism, Azure event hub consumption.

Technology Azure: Event Hub, node.js , PostgreSQL

Legacy to .net core and Azure movement

This project is to migrate the old .NET framework based apis into .netcore 3.1, node.js and deploying the code to azure

- Planned and engaged in the knowledge transfer and understanding of the existing application.
- Worked closely with customer architects to create the architectural and development road map.
- Created and defined architecture governance standards and processes.
- Responsible for creating key architectural designs and documenting them
- Designing and mentoring proof of concept and reusable components development.
- Demonstrated complete ownership in problem management and identifying correct component corresponding to the problem statement.
- Implemented pub sub using Azure serverless technology.
- Implementing Mediator pattern in .net core.

- Deploying .netcore applications in azure web app
- Ensured solution delivery is done as per agreed standards.

Technology: Visual Studio 3.1 , Visual Studio code, Angular and Azure

June 2020 – December 2020

Role: Architect – Solutioning and Consulting **End Client:** Marks and Spencer, Bangalore India

Employer: Tata Consultancy Services

Mainframe Migration Project

Metrc is a Mainframe based application need to be migrated to Azure. The CICS screen needed to be converted into React and the JCL jobs will be migrated to C# based Batch jobs and Azure databricks jobs using Scala 3.0 and apache spark.

- Understanding the existing UI and DB structure along with the respective pillar leads.
- Worked with the community developers and architects of the corresponding technology to understand their use cases.
- Defining different move groups and worked on designing micro service architecture for them.
- Worked in Request for Proposal and Strawman document for understanding the available tech stack, TCO and worked in liason with Business Development team to draft estimate person hours for migration.
- Installing Istio in AKS for hosting the microservice.

RACF to Azure Active Directory

Analyzed the Authentication and authorization mechanism of the mainframe RACF. Created active AD groups for users based on roles and responsibilities.

Environment: Visual Studio code, Azure

January 2020 – June 2020

Role : UI and Cloud Architect

End Client: Marks and Spencer, Chennai India, London United Kingdom

Employer: Tata Consultancy Services

Christmas Food to Order Migration FESK (Front End Starter Kit) MIGRATION

CFTO is a heavily used website for MarksandSpencer in the holiday season (October – December). This website has similar feature just like the main website.

- Understand the existing python code and the different foods related data.

- Worked in liaison with the business to understand changes based on customer behaviour for a particular food product and designed the api response targeting those food products facets.
- Created project solution and defined static code for the products.
- Worked in liaison with the SEO team to make changes in the link based search.
- Created CI/CD related code for deploy azure movement.

Environment: Visual Studio Code, React, Akamai, Git, macOS.

January 2018 – December 2019

Role : UI and Cloud Architect

End Client: Marks and Spencer , Chennai India, London United Kingdom

Employer: Tata Consultancy Services

**.com Search Results and Product List Page Migration Project:
FESK (Front End Starter Kit) MIGRATION**

SRP and PLP are heavily used pages of M&S website. This allows both user free text search and link click based search. This was written in Angular js which needed to be migrated in new framework written in HandleBars and needed to be hosted in IBM Bluemix environment.

- Understand the existing functionality and the technology stack used with it.
- Understood the product requirements and worked on plan along with scrum master and product owner.
- Created product architecture, repository and CI/CD pipelines in github and concourse.
- Designed the cache strategy for all the api calls based on the frequency of use.
- Analysed and defined memoize cache for the apis
- Coded based on mobile first approach using SASS and SCSS.
- Created new rules in akamai for the web pages.
- Performed Test driven development for the search results using both front and back end.
- Worked in liaison with the SEO team to make changes in the link based search
- Coded the yaml files to host them in the Bluemix environment. The environment was created for 3 Dev, QA and Prod and along with one Automation test execution environment.
- Mentored offshore developers while coding when at onshore.
- Periodically connecting with product owner to understand the upcoming business and help creating new items in back logs .
- Designed path for static assets.
- Participated in daily scrum calls, sprint planning meetings.

Azure Migration

- SRP Pages are currently hosted in Bluemix environment. They need to be migrated to azure environment.

- Worked with the platform team to create the azure environment which includes Resource Groups, AKS for lower environments.
- Added the security keys with the help of azure team in project vault.
- Created yaml files, helm templates to create CI/CD pipelines.
- Created docker images and pushed it in the azure.
- Worked in liason with the Akamai team to have the application end points hosted akamai.
- Joined the Architect's team to determine the cache strategy and have it set in akamai.

Environment: Visual Studio Code, Akamai , git, macOS.

Role : Senior dotnet developer and onshore coordinator

End Client: PNC Bank , Pune India, Ohio USA

Employer: Tata Consultancy Services

Multiple dotnet development projects

January 2011 – December 2017

Previous Experience

Infosys Technologies

August 2006- December 2010

.net , Sql Server Developer

Pune-India, Sao Paulo-Brazil

Bachelor's of Technology (ECE)

Ambedkar Institute of Technology - Guru Gobind Singh Indraprastha University 2006