Amit Prakash Singh

Solution Architect - Java, Spring, Angular, Python, Docker and Kubernetes

+1-647-504-4878 | amit.prakashsingh@gmail.com

SUMMARY

Certified on AWS and Azure cloud, I am an experienced leader in the design and development of web applications with a modern Cloud Native solution stack.

Currently, I am building an Azure Native Data lake solution that will replace the current on-prem Hadoop solution. Azure Data Lake features Azure Data Factory, DataBricks, ADLS, Synapse and Azure ML.

| Areas of Expertise | Technical Proficiencies | |
|---|--|--|
| Solution Architecture Full Stack Development Java JEE Functional Programming DevOps | AWS, Azure, Docker ADF, ADB, Azure Synapse Java, Python, Scala JavaScript Framework (Angular, React, Node) Jenkins, Ansible, Terraform | |

Professional Experience

TD Bank Jan 2020 – Till Date

Cloud Solution Architect

Tech Stack – Azure Data Factory (ADF), ADB, Azure SQL, Azure Synapse Analytics

I am building a design for an Azure Data Lake solution based on native Azure services. I have built the proof of concepts, designed ingestion, extraction and data migration solutions for the enterprise data lake. Currently, I am working on designing a sandbox environment for analytics workload on the data lake.

Building a next-generation data lake solution in Azure cloud with native Azure services involves the integration of multiple Azure services. Key Azure services utilized for the data lake solution are Azure Data Lake Storage (ADLS), ADF, Azure Databricks and Azure Synapse.

Key Achievements:

- 1. Built solution design of 3 data zones for multiple Line of business and data sources
- 2. Created TIBCO MFT based integration for On-Prem Edge node to cloud data movement
- 3. Designed ADB integration with ADLS and Synapse for Advanced Analytics
- 4. Designed data access pattern for an analytics use case with Azure Synapse Analytics
- 5. Executed Proof of Concept of an ADF based ingestion framework for data ingestion
- 6. Executed Proof of concept on Talend and Tableau integration in IAAS setup

Technical Lead

<u>Tech Stack</u> – VMC Cloud, Elasticsearch, Grafana, Kibana and Logstash, Ansible

Designed and built and VMC cloud-hosted Elastic stack that provides enterprise-wide monitoring, reporting and analytics capability for the Hadoop Data Lake implementation. The data lake is a Hadoop cluster and runs hundreds of applications and jobs daily.

This Next-Gen monitoring solution on Elasticsearch Stack is highly available and resilient by design. The solution ingests hundreds of gigabytes of logs from multiple sources and applications on the Hadoop platform and performs a necessary transformation on the go. Ingested logs are used to build mission-critical dashboards and key system Alerts.

Key Achievements

- 1. Designed an Elastic Stack-based solution on private VMC cloud that provides a highly available monitoring solution for the enterprise data lake
- 2. Built Platform monitoring dashboard for multiple services with Logstash, metric-beat and file-beat combination.
- 3. Created custom plugins, adapters and pipelines for data extraction and visualization.
- 4. Built cloud setup of Elasticsearch using Elastic Cloud Enterprise
- 5. Performed full automation of CI/CD task through Jenkins and ansible

Accenture Services Pvt. Ltd.

Sep 2011 – Mar 2018

Solution Architect

HMRC – Gov.UK

Tech Stack - Angular, SpringBoot Microservices, AWS EC2, ALB and API Gateway

Technical Lead - Responsible for design and build of *Execution Architecture* for the application modernization project. Serve as a vital resource for the build team, overseeing build progress and providing strategic directives in the implementation of complex architecture modules. Build future-ready delivery teams by planning and executing modernization of tech stack across multiple sprint teams.

Key Achievements

- 1. Won new HMRC contract through a successful demo of multiple high-stake proofs of concept developed using Angular and SpringBoot Microservices in AWS environment
- 2. Designed, developed and integrated the multiple AWS services and created multiple environments for delivery teams for faster and consistent delivery of multiple services.
- 3. Rolled out the Execution Arch for 3 delivery teams by planning, execution and successful deployments of multiple sprints.
- 4. Lead the design and development of a virtual assistant program that sparked interest and enabled us to pursue multiple clients.

5. Initiated project-wide AWS, Angular and SpringBoot up-skilling drive and trained 20+ developers across 3 teams onshore and offshore.

| Accenture Services Pvt. Ltd. | Apr 2014 – Aug 2016 |
|------------------------------|---------------------|
| Technical Lead | |

Leading delivery teams in design, build and execution of complex large-scale implementation projects. Serve as technical lead by designing solution architecture, overseeing build progress and monitoring quality of the delivered solution. Key decision-makers on technology selection, planning and resource allocation. Leading account-wide quality initiative by the introduction of automated quality tools and reporting frameworks. People developer and a training champion by conducting workshops, training and webinars. Creating technical content, presenting white-papers and leading reviews of projects.

Key Achievements

Lead the setup, execution, and delivery of a multi-phase Custom Off-the-Shelf system implementation project that enabled faster delivery, better cost optimization and greater flexibility in resource allocation throughout the project lifecycle.

- 1. Enabled an enterprise-level integration approach for remote systems integration with a COS solution that promotes scalability and high performance through non-blocking operations.
- 2. Focused on knowledge exchange and upskilling drive that enabled smarter team repositioning over time and provided greater flexibility in delivery.
- 3. Achieved over 90% reduction in the cost of delivery by training new developers on custom scripting technology by planning and delivery of training tailored specifically for the project.
- 4. A highly decoupled and cohesive Spring-AOP-based modularised design was built that provided key application-wide services like encryption, logging and auditing.
- 5. Designed integration of printer infrastructure for the project from a remote system that was acknowledged by the client for being the first time right.

| Capgemini Services Pvt. Ltd. | May 2010 – Sep 201 |
|------------------------------|--------------------|
| ITollGate – GE Aviation | |

Developing new solutions for a large enterprise client by providing technical and thought leadership, planning and managing project execution from inception to delivery. Partner with senior leadership to showcase and introduce new technology in an established solution framework thereby opening new opportunities to innovate and grow.

Key Achievements:

- 1. Architected a Spring-IOC & JSF framework in JBOSS portlet environment to build an extensible and configurable solution
- 2. Efficient and scalable database modelling by creating logical and physical data models in compliance with relational modelling practices
- 3. Designed a robust and feature-rich 'Report Framework' built on Open source JFreeChart API providing analysis of over 35 real-time parameters with interactive graphical capabilities

4. On-time execution of 3 SIT and a UAT phase over the 6-month period while planning and building of the continuous integration for the project.

| J.P. Morgan | Jan 2008 – May 2010 |
|--|---------------------|
| General Ledger Reconciliation & Substantiation | |

Senior application developer for corporate technology. Design and develop enhancements. Provide production support level 3.

Key Achievements:

- 1. Developed some of the key components of the GLRS application that is based on the custom framework of the bank
- 2. Developed reports on Business Objects
- 3. Provided L3 support on the legacy production system (RCP/RMR)
- 4. Earned the Certified Web Component Developer (SCWCD)
- 5. Awarded top-performer recognition in both the years with the bank

| Tata Consultancy Service Private Ltd. | Oct 2005 – Jan 2008 |
|---------------------------------------|---------------------|
| Software Engineer | |

Key Achievements:

- 1. Developed high priority enhancements for the client's global travel advisory system and the Travel & Living system
- 2. Developed an innovative solution to maximize the support team's efficiency and gave a demo to the client
- 3. Learned 3 different technology stacks, BREW (Mobile), Java/J2EE and Oracle Purchasing
- 4. Earned my first Java Certification in my very first year of the work

EDUCATION

Bachelor of Engineering (Jul 2005 - May 2005)

Institute of Engineering and Technology, Indore, India

PROFESSIONAL CREDENTIALS

| AWS Solution Architect Associate | May 2020 |
|---|-----------|
| Azure Fundamentals | Oct 2020 |
| Sun Certified Web Component Developer | July 2010 |
| Sun Certified Java Programmer certification | May 2006 |
| IIBA Certified Business Analyst | Apr 2012 |