**Mayank Tripathi**

[**https://mayanktripathi4u.github.io/Profile.github.io**](https://mayanktripathi4u.github.io/Profile.github.io)

**Profile:**

Dynamic Technical Program Manager with expertise in data engineering and database solution architect with 16+ years of experience in database development and architecture. Currently serving as an Associate Principal - Technology / Data Engineer Project Manager. Led cross-functional teams to deliver data solutions, resulting in a 40% decrease in fraudulent activities and an 8% boost in revenue. A data-driven decision-maker, committed to driving excellence and adding value to data-centric initiatives. Passionate about customer and employee engagement.

**Experience:**

* Currently working as Data Engineer Project Manager / Associate Principal Technology with total experience of 16+ years working with various Databases such as Oracle; PL/SQL; MySQL; MS-SQL Server; T-SQL; SQLite; Graph Database as Neo4j.
* Provided oversight and management to multiple programs across data engineering and software development disciplines supporting high-visibility.
* Also do have good exposure in Cloud (AWS) and Programming Languages & Libraries such as Python; PySpark; Databricks; R; Numpy; Pandas; Matplotlib; Seaborn; Linux; AWK to name a few.
* I have experience in database / Data Architect and data modeling and Solution Architect.
* My experience also includes migration of data; databases and applications from on-prem to Cloud (AWS).
* Responsible for end-to-end of the module from designing, development, unit testing and deployment to production and also responsible for fixing the bugs or defect triages during the Agile flow. Responsible for maintaining data quality and data consistency.
* Total experience in Cloud Technology (AWS) is ~5 years.
* Experience in migrating On-Prem Oracle Database to AWS RDS, and making sure that the database is Highly Available, its scalability and Security of the data.
* Had leveraged AWS services such as AWS Glue; AWS Lambda (code written in PySpark) to create ETL Pipeline for external file processing, data enhancement and loading into Oracle tables(s).
* Leveraging AWS DynamoDB for configuring the client specific values which later used in AWS Lambda.
* Created AWS EC2 instances for ad hoc Data Analysis and Reporting.
* Created logic to upload the files, images in AWS S3 bucket through API Gateway.
* Having a total of 10+ years of experience with database architecture.
* Expert in data architecture and implementing highly available and scalable data stores using different technologies like Oracle, MySQL, MS-SQL Server, DynamoDB and Neo4j.
* Designing effective schemas to ensure data consistency and reliability.
* Good exposure in performing database installation, upgrades, capacity planning, data migration and performance monitoring across multiple database server architectures / systems.
* Experiences in designing and implementing high availability and disaster recovery solutions to minimize database downtime for planned / unplanned outages.
* Designed and Implemented Oracle Database environments from scratch.
* Created database Standard Operating Procedures (SOP) and Runbooks.
* Defining database physical structure and functional capabilities, security, back-up, and recovery specifications.
* Improved solution execution time by implementing database best practices.
* Used various tools for data modeling such as Toad Data Modeler; Oracle SQL Developer; ER/Studio; Erwin Data Modeler and Lucid Charts for specific purposes.
* Implemented the BPI (Business process improvement) & Functional Process Improvement practices to constantly analyze and identify the areas to improve accuracy, effectiveness and efficiency.
* Total of 11 years of experience in Database Development using Oracle and PL/SQL.
* Extensively worked on Oracle PL/SQL packages, procedures, functions, cursors, CTE’s, temp tables, analytical functions to fulfill the business needs.
* Responsible for securing the data be it in-transit or at-rest using hashing and secret key.
* Good exposure using SQL Loader to load data from external files into tables of an Oracle database.
* I have written business logic for the complex data flow from multiple source tables to destination table(s).
* Written complex business logic to satisfy the business rules.
* Good exposure in designing and data modeling based on the Business requirement and also converting the data model into physical database objects such as Tables; View and managing data flow.
* Involved in identifying and addressing bottlenecks and other issues that are limiting the system's performance, and optimizing the performance of a system or application to improve its speed, efficiency, and responsiveness. Inshort good exposure in Performance tuning.
* Total of ~3 years of experience in NoSQL such as AWS DynamoDB and GraphDatabase Neo4j.
* Exposure designing and creating the data nodes and relationships in Neo4j for Claims Data, and finding patterns in the claim flow and reporting the result to Business for better decision making.
* Total of 10 years of experience in MS-SQL Server, T-SQL; MySQL. Good exposure creating all types of objects such as stored procedures; functions views etc and able to manage the data flow.
* Total experience of using Python is nearly 6 years and 1 year for PySpark; nearly 1 years of experience using Databricks.
* I do have good exposure using Python for data analysis using libraries such as Numpy; Pandas. Created multiple Python in-house applications for data analysis; comparing the data feed from various sources to the destination; generating the excel report for the finding, to take appropriate action before it becomes critical.
* Creating complex logix using PySpark DataFrame and PySpark SQL to process data from external files with multiple data enrichments before loading into the destination oracle table(s).
* Experience in developing PySpark applications using Spark-SQL, Spark-DataFrame in Databricks for data extraction ; transformation and aggregation from multiple file formats for analyzing and transforming the data to uncover insights into the customer usage patterns.
* Responsible for estimating the cluster size, monitoring and troubleshooting of the Spark Databricks Cluster.
* Extensively using Git; GitHub as repository and exposure on CI / CD process & tools to integrate with Jira; Slack; GitHub Actions to streamlining and automate the deployment process.

**Technical Skills:**

**Database Technologies:** Oracle, MS-SQL Server, MySQL, MongoDB, DynamoDB, SQLite.

**Programming Language and Libraries; Framework / Tools:** Python, R, JavaScript, Numy, Pandas, Matplotlib, Seaborn, scikit-learn, TensorFlow, Keras, PySpark, Databricks.

**Graph Database:** Neo4j

**Cloud / AWS:** AWS Lambda, AWS Serverless, AWS SQS, AWS EC2, AWS S3, AWS Glue. AWS Athena, AWS API Gateway

**Version Control:** Git / GitHub / GitBash / BitBucket, SVN

**CI-CD Tools:** Jenkins, Jira

**Container software:** Docker

**Reporting:** SSRS, Crystal Reports

**Others:** Linux, AWK, Data Modeling Tools, Confluence; Bash/Linux shell scripting, Toad, SQL Developer, Machine Learning

**Professional Experience:**

**Synechron, Nashville, TN Nov 2011 – Present**

**Client: Asurion (Domain: Mobile Insurance)**

**Data Engineer Project Manager / Associate Principal - Technology**

* Currently using Oracle; PL/SQL; AWS; Python; PySpark, Databricks; BigData as primary skills.
* Managed teams of software, data engineer and database professionals resulting in a 15%-20% increase in productivity.
* Developed and executed project plans resulting in 90%-95% on-time program delivery.
* Maintained positive customer relationships resulting in a 95% satisfaction rate.
* Implement Agile methodologies resulting in a 30% decrease in project timelines.
* Mentor and coach junior program managers resulting in a 15% increase in team productivity.
* Worked with the Data and Analytics team to architect and build data lake using various AWS services like EMR; S3; Athena; Glue; Redshift etc.
* Implemented dimensional Data Modeling to deliver Multi-Dimensional STAR, Snowflake schemas by normalizing the dimensional tables as appropriate in Data Warehouse and (or) Data Lake.
* Developed the ETL data pipeline to extract the data from various sources and loading into SQL server data warehouse after transforming and manipulation for further decision making.
* Implemented DevOps methodologies resulting in a 40% decrease in software deployment times.
* Involved in all phases of the life-cycle of the task including requirement study, architect, design, documentation, development, testing, and deployment.
* Developing best practices for data coding to ensure consistency within the system.
* Implementing data strategies and developing physical data models.
* Collaborate with cross-functional teams, including software engineers, business stakeholders to understand data requirements and provide technical solutions.
* Creating different algorithms to discover the patterns in user behaviors, identify user feedback, check security events, and ensure compliance with established rules.
* Provided technical support to resolve or assist in resolution of issues relating to database management systems.
* Continually explore new technologies in an effort to always grow and uncover better ways to solve problems.
* Orchestrated the migration of existing millions of customers from a legacy system to an enterprise platform.
* Conducted regular maintenance schedules and preventative measures on the database and data.

**eBusinessware India Pvt Ltd April 2010 – Nov 2011**

**Client: Bloomberg (Domain: Financial Compliance)**

**Software Engineer**

**Global ProServ Limited Dec 2009 – Feb 2010**

**Client: In-House project**

**Software Engineer**

**iSmart e-Solutions (formerly known as Zoom Developers) Jun 2007 – Dec 2009**

**Client: Indian Government.**

**Software Engineer**

**Education:**

* MBA-COMPUTER MANAGEMENT from School of Computer Science, D.A.V.V University, Indore. May 2007
* BSC in Computer Science, DAVV University, 2004

**Certification:**

* AWS – Solution Architect
* R for Data Analysis Certification (from Alison)
* DataOps Fundamental Certification -

<https://click.pstmrk.it/2s/learn.datakitchen.io%2Fcertificate%2FODIwMDBfMTEyMDIyOA%3D%3D/X31LMTQN/XmMt/nsBTbZ1O-P>

* Certified Data Science Practitioner (CDSP by CertNexus [https://www.credential.net/40e1a477-c942-4be6-b827-764febe98da9#gs.8i o0jv](https://www.credential.net/40e1a477-c942-4be6-b827-764febe98da9#gs.8io0jv))
* Data Science Contribution (refer to my profile below for details <https://datascience.foundation/individual/view/1094>)
* <https://www.kaggle.com/dskagglemt>
* Neo4j – Graph Database Certification
* MongoDB University Completion Certification.