# **Vivek Nigam**

(Cloud Data Architect (Snowflake/Teradata Vantage))



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# **PROFILE SNAPSHOT**

- Exploring challenging assignments with a reputed organization to leverage acquired skills in accomplishing organizational growth objectives.
- Cloud Data Architect with 17 years of experience in Consulting, Architecting, Solution Design. Exposed to working in role like Cloud Data Architect (AWS/Azure), Migration Strategy & Implementation (Snowflake, Teradata vantage, Redshift), CoE Lead, Solution Architect and Technical Presale.
- Core Technical Skills Snowflake (SnowQL, Pipe, Sp, SnowPark), Teradata Vantage Cloud Lake (TPT, BTEQ, ML, FL, FE), Redshift, SQL Server, AWS, Azure, Cosmos DB, ADLS, ADF, Python, Qlik Replicate, Platform Sizing & Estimations.
- Earn certification on Snowflake Advance Architect, Data Cloud Deployment Framework Teradata Vantage Associate, Data science with Python (Simplilearn).
- **Modern Data and Analytics** projects for Development and Service Delivery (Hybrid, Waterfall and Agile Methodology).
- Worked across Industry domains like BFSI, Retail, Pharma and Telecom.
- Idea and implementation of automation framework for **Data Discovery**, **Cost and Space Optimizer (Snowflake, Teradata)**, **Teradata code complexity analyzer**, **Metadata collection for Data Mesh**.
- Publish various comparative studies, best practices and PoV/PoC for Teradata to Snowflake/Synapse Teradata Vantage Cloud, migration mapping framework and guide to map Teradata to snowflake best suitable object mapping and conversion adoption recommendation.
- Market research about new Modern Datawarehouse tools and offerings.
- Earn Master of Computer Application (MCA) degree from VTU, India.

# TECHNICAL SKILLS

- Cloud Computing AWS, Azure
- Automation Python, Airflow
- ➢ BIGDATA −Hive, Spark, EMR
- On Prem Databases Teradata, Oracle, SQL Server
- Cloud Datawarehouse Snowflake, Teradata Vantage Cloud Lake, Redshift
- NoSQL COSMOS db
- > ETL, CDC Tools Qlik, AWS Glue, ADF, Teradata (BTEQ, ML, FL, TPT)
- Lineage & Governance Tools Collibra, Snowflake Lineage & Governance capability
- Data Virtualization Tools K2View, Starburst, Dremio
- ➢ OS − Windows Family, Linux family

# CERTIFICATION

SnowPro Core Certification (Snowflake) Cloud Analytics Architect (Snowflake) Teradata Vantage Associate (Teradata) Datascience with Python (Simplilearn)

# PROFESSIONAL EXPERIENCE

- > Bigdata Dimension Inc(Reston,VA) Labs (US) Cloud Data Architect from April`23 to till date
- Accenture (ATCI) **Cloud Data Architect** from May`21 to March`23
- QuEST Global (Bengaluru) Sr. Technical Architect from Oct 2019 to April 21

- HCL Technologies (Bengaluru) Technical Architect from Jan`2016 to Oct`2019
- Wipro Technologies (Bengaluru) **Technical Lead** from June`2012 to Jan`2016
- > IBM India Pvt. Ltd. (Bengaluru) Application Lead from May`2011 to Jun`2012
- Mphasis an HP (Bengaluru) **Module Lead** from June`2007 to May`2011
- Nuware System Pvt. Ltd. (Bengaluru) S/W Engg. From May 2006 to June`2007

# **KEY PROJECTS**

#### BDD (Since April`23 – till date)

# **Client: NT**

#### **Key Result Areas:**

- Discovery assessment for on-prem oracle to Snowflake (Azure)
- Python based frame work solution designing
- Technology assessment for history and cdc pipelines based on existing and new offerings
- MVP for one subject area for 5 TB data migration
- Near real time data integration using snow-pipe
- Data movement between raw to conform and finally model layer using stream, task, and snow-park/sp capability to model layer

#### CDM (Since May'21 - till date) - On - Prem to cloud migration assets

# Client: Cloud First (Cloud data migration CoE)

**Key Result Areas:** 

- Data mesh offering solution using various technology stacks.
- Partnership management and negotiation with Teradata team to build capability on Teradata Vantage in migration and internal tools offering under migration umbrella
- Patient submission for cloud Datawarehouse to Teradata Vantage migration framework
- Creation of Discovery, Migration recommendation and TD Object Complexity (sp/views/bteq/macros/udf etc.) Analyzer
- Snowflake Competency & CoE building on Modern Datawarehouse's area
- Managed Snowflake & Teradata partnership and provided growth plan from CoE end.
- Nurtured and trained 20+ resources on snowflake
- Trained 30+ resource on Teradata and run certification drive to get 20+ certified professionals
- Integration of Teradata-to-Teradata Vantage migration capability and validation in house tool (SDTT)
- During RFP's support presales/sales teams including solution architecture/estimates/resource loading plans
- Solution for business cases like Teradata migration/offloading to cloud/low cost environment or Hybrid architecture
- POC's for workload management and simulation for Teradata and Snowflake platform
- Support on demand to Delivery teams for discovery and migration support
- Creating PoV's for marketing and branding team for Teradata & Snowflake Assets for migration, ecosystem, comparative study etc.

# Client: PUTNAM (Dec`22 to till date)

# **Key Result Areas:**

- Discovery Lead from for Oracle system to Snowflake Migration
- Migration and history data load strategy and system designing
- Implementation and enhancement of existing discovery tool and provide the insight about system
- Automated schema and data extraction from oracle system and shipping into S3
- Metadata driven ingestion framework design and building the pipeline to load data from S3 to snowflake stage
- Target system loading into snowflake using stored procedure and snowsql
- Snowflake environment is composed of a stage, RAW(Pre-Governed), Governed, integrated and semantic data layers to move and aligned data from RAW format to usable format within functional data-marts
- CDC pipeline implementation using IICS jobs and workflow orchestrations
- Automated data reconciliation using smart data validator (python-based tool), field validation, null value validation, numeric value validation, average value validation, chunk md5 hash value validations

# Client: JPMC (July`22 to sep`22)

#### Key Result Areas:

• Discovery Lead from offshore for teradata 1.6 PB system to Snowflake Migration

- Implementation and enhancement of existing discovery tool and provide the insight about system •
- Detailed analysis of system on various dimensions like #of database, size of databases, databases size counts, data objects count, number of ETL jobs
- Creation of ecosystem tools and consumption and feeding patterns matrix
- Creation of complexity matrix based on time to move and job complexity which help to understand the weightage of migration consideration
- Creation of system growth matrix to understand the volumetric and compute- based pattern for future system sizing to accommodate existing and new workload on cloud
- Analysis and mapping the Consumer and Feeder pattern to identify the applications and their respective users which need to accommodate in migration plan
- Operational matrix creation to map applications, databases to business unites based on size and job complexity running on databases, interdependency of databases on one to many and many to many databases and application to come up with optimized migration Wave plan based on downtime window supported
- Migration strategy and approach option for Teradata Vantage and Snowflake
- Pilot on small subset of Wealth Management system to convert and transform process in Snowflake

# Client: FedEx (April<sup>22</sup> to July<sup>22</sup>)

#### **Key Result Areas:**

- Discovery Lead from offshore for two large system of 350 & 750 TB size •
- Implementation and enhancement of existing discovery tool and provide the insight about both system
- Detailed analysis of system on various dimensions like #of database, size of databases, databases size counts, data objects count, number of ETL jobs
- Creation of complexity matrix based on time to move and job complexity which help to understand the weightage of migration consideration
- Creation of system growth matrix to understand the volumetric and compute- based pattern for future system sizing to accommodate existing and new workload on cloud
- Analysis and mapping the Consumer and Feeder pattern to identify the applications and their respective users which need to accommodate in migration plan
- Operational matrix creation to map 162 applications, 368 databases to 20 business unites based on size and job complexity running on databases, interdependency of databases on one to many and many to many databases and application to come up with optimized migration **Wave plan** based on downtime window supported
- Migration strategy and approach option for Teradata Vantage and Snowflake
- Migration of small subject area for reporting system from Teradata to Snowflake

# Client: M&T (March`21 to June`22)

# **Key Result Areas:**

- Discovery Lead from offshore for small size system of 20 TB size •
- Implementation and enhancement of existing discovery tool and provide the insight about both system
- Detailed analysis of system on various dimensions like #of database, size of databases, databases size counts, data • objects count, number of ETL jobs
- On prem Teradata System upgrade testing support as SME
- Migration of small subject area for reporting system from Teradata to Snowflake and Teradata Vantage as client wanted to evaluate both solution

#### Client: Biogene (July`21 to March`22) **Key Result Areas:**

- Discovery of oracle on prem system to migrate to Snowflake •
- Migration of oracle existing data-warehouse to snowflake NGDW solution
- Conversion of oracle schema using inhouse tool and manual fitments
- Conversion of oracle package, stored procedure in snowflake stored procedure (JavaScript)
- Automated data ingestion and extracts framework building using snowflake stored procedure to populate stage tables
- Data Validation framework building to validate data on subsets, checksums and various other methods
- Data Making for roles and lower environments sharing
- Marketing DataMart's creation for data profiling

# ETS (Since Oct'19 - 2021) - Data Engineering CoC Lead

# Client: HP (Since April`20 - Current)

# **Key Result Areas:**

- Engage from RFP phase for solution and estimates
- DD & Assessment to recommend cloud solution as per current technologies stacks
- Migration strategies and plan for Sql Server On-Prem to Azure Cosmos Db
- Cosmos Db modeling and implementation
- History data & CDC pipeline for new system
- API integration between Cosmos & On prem Cassandra cluster
- Azure public & private cloud integration for Cosmos dB instances
- Migration strategies and plan for Redshift to Snowflake
- Assessing and mapping Redshift current cluster type, data volume and workload to map
- Databricks spark ETL jobs mapping from Redshift to Snowflake
- History data & CDC pipeline for new system

# Client: ETS as Applie (CoC) - Quest Global

# **Key Result Areas:**

- Competency & CoC building on Modern Data Engineering space (Snowflake/Teradata/Redshift/SQL DWH and other cloud and modern data-warehousing areas)
- Building python-based tool to migrate any RDBMS database to Snowflake or any other cloud data warehouse platform for schema and simple process with given flexibility to change data model
- Paid POC project for snowflake compatibilities system, integration, performance testing and fast data movement
- Nurturing and training resources on Snowflake/AWS
- Building cloud agonistic solution for data-warehouse space
- Visit client places for DD and on- demand POC's
- During RFP's/RFI support presales/sales teams including solution architecture/estimates/resource loading plans
- Solution for business cases like Teradata migration/offloading to cloud/low cost environment or Hybrid architecture
- Support on demand Day Zero role for Delivery teams for new engagement
- Connecting to delivery teams at regular intervals to understand pain area and deliver new features and offering from CoE
- Delivery support in initial phase for cloud data warehousing project on Snowflake/AWS Redshift
- Support IDU for nurturing people on Snowflake & Azure Cloud

# DNA-Prod Mgmt & CoE (Since Jan'16 – Oct`19) – Leading Snowflake/Aws Redshift/ Teradata CoE

# Client: HCL-DNA

**Key Result Areas:** 

- Snowflake Competency & CoE building on Modern Datawarehouse's area
- Managed Snowflake & Teradata partnership and provided growth plan from CoE end.
- Nurtured and trained 20+ resources on snowflake
- Trained 30+ resource on Teradata
- Designed and developed Teradata space and cost management accelerator framework
- Visit client places for DD and on- demand POC's
- Present DNA capability to client during RFI/RFP/Initial engagement phase
- During RFP's support presales/sales teams including solution architecture/estimates/resource loading plans
- Solution for business cases like Teradata migration/offloading to cloud/low cost environment or Hybrid architecture
- POC's/POV based on solution/pre-sales team, client or delivery team
  - o Teradata to Redshift
  - Teradata to Snowflake
  - $\circ$  ~ Teradata on prem to Teradata Cloud
  - Teradata to Oracle (BDA)
- Support C&C and TEX team for internal training and resource evaluation
- Support on demand to Delivery teams
- Connecting to delivery teams at regular intervals to understand pain area and deliver new features and offering from CoE

# KDP as Solution Architect (From Mar`19 to Oct`19)

# Client: KDP

# **Key Result Areas:**

- Solution design for green field customer (Snowflake Azure cloud)
- Due diligence
- Nurtured and trained resource on Snowflake
- Mapping for new Tables/Views in Snowflake
- Full/CDC ETL design using SnowCLI/Informatica Cloud
- Designing of materialized view for data science team
- Supporting offshore development team
- Designing of Access points in Snowflake database
- Data Reconciliation
- Client communication

# Charter as Solution Architect (From Sep`18 to feb`19)

# Client: Charter

# **Key Result Areas:**

- Migration strategy and solution from Progress db to Snowflake for all reporting Apps.
- Mapping for new Tables/Views in Snowflake
- Full/CDC ETL design using SnowCLI
- Due diligence & Development support
- Designing of Access points in Snowflake cloud Datawarehouse
- Re-pointing tableau reports to Snowflake
- Data Reconciliation
- Client communication

# Merck as Solution Architect (From July`17 to Jan`18)

# Client: Merck US

# **Key Result Areas:**

- Mapping for new Tables/Views in Redshift
- Full/CDC ETL design using Attunity replica
- Development
- Designing of Access points in Redshift database
- Data Reconciliation
- Client communication

# BBBY as Solution Architect(From Jan`16 to April`17)

# **Client:** Bed, bath and Beyond (US) **Key Result Areas:**

- Impact assessment
- Mapping for new projects
- Requirement analysis
- Development
- Scheduling
- Testing
- Client communication

# LLOYDS BANKING as Solution Architect (June`12 to Jan`16) – Retail & whole sale customer platform

# Client: LLOYDS BANKING, UK

# Key Result Areas:

- Requirement gathering from platform SME.
- System analysis and preparing design documents like MLPD & TDD.
- Data migration and loading in Grid using the FSLDM approach, as Grid is built on TD FSLDM.
- Preparing Estimates for study & DBTR phase and detail level designs.

• Technical support to development and testing team.

# MEDCO as Module Lead (May'11 - Jun'12) - ARC reporting

# Client: MEDCO, US.

# Key Result Areas:

- $\circ$   $\;$  Requirement gathering from platform SME.
- System analysis and preparing design documents.
- $\circ$   $\;$  Data migration and loading in ARC reporting layer.
- $\circ$   $\;$  Preparing Estimates for study & DBTR phase and detail level designs.
- $\circ$   $\;$  Technical support to development and testing team.

# VF-GERMANY as Tech Leader (Oct'08 - May'11) - ENTERPRISE DATAWAREHOUSE (EDW)

# Client: Vodafone, Germany.

# Key Result Areas:

- Import/Export of data using teradata utilities like Fastload, Fastexport and Bteq scripts.
- Creation/modification of new/existing database objects and their corresponding loading scripts as per requirements.
- Involved to prepare the Unit Test and analyze the test results.
- Involved to given solution for the incidents which raise in production environments.
- Responsible for creation of test specification as part of system testing.
- Coordinating with on-site teams during offshore development
- Validation of target data with source data.
- Initiated project weekly status meetings.
- Involved in Performance tuning.
- Involved in peer-review activities.
- Handling management activities like delivering weekly and monthly status reports and monitoring project flow and planning.

**VF DE Wave – 5** as Project Leader (June'07 – Nov'10) - Project Governance SQL server, MIS alea, Alea admin console,MIS studio,DTS package,VBA

# Key Result Areas:

- Involved in requirement gathering in client place along with work experience.
- Preparation of KT documents for offshore member.
- Creation of db and db objects (tables, views, procedures, functions, triggers) and DBA stuffs in MSSQL 2000/2005.
- Designing, execution and scheduling of DTS Packages.hbt
- Prepared POC on SSIS, SSAS and SSRS tools as part of project work.
- Creation of repository for OLAP database using MIS studio modeling tool.
- Designing of attributes tables, subsets, dimension, cubes and data area for cube.
- Creation of MCF for installation based on development and also prepares the solution concepts based on requirements.
- Designing of MIS studio script for import and export of data from OLAP database to SQL database vice versa.
- Designing and implementation of Access db, linking of SQL Server database tables form designing and coding using macros and VBA.
- Define test specification and execution of test cases in Mercury Quality Center 8.2.
- Import/Export of data using Teradata utilities like Fastload, Fastexport,Tpump and Bteq scripts.

Position2 AdWord Reporting Tool as Team Member (May'06 – June'07) - VB.NET, ASP.NET, SQL Server Database, SSRS, SSAS, Win-2000 server, SSIS

#### **Key Result Areas:**

- Designing and Development of SSRS report using OLTP & OLAP data model
- Done the unit testing and written the test cases for various reports
- Involved in coding and designing of views
- Involved in coding of Business Logic
- Involved in design the reports and integration with .net code

#### **Personal Details**

Name: Vivek Kumar Nigam Date of Birth: 10/04/1980 Designation: Cloud Data Architect Passport: P4603145 Business Visa: US H1B: Work Authorization until 12/2025 Current Location: Winchester (VA) USA Passionate About: AI & ML Trainings :

- Microsoft Modern Datawarehouse training (MS partnership program 3 day's)
- AWS Big data boot Camp (Partner Program AWS)
- Data Science with Python (Simplilearn)
- Azure 303 & 304 ongoing