**ELSON JEEVA THOMAS**

MOBILE: +44-7448022620

EMAIL: elsonjeeva@hotmail.com

LINKEDIN: [https://www.linkedin.com/in/elson-thomas](https://www.linkedin.com/in/elson-thomas-216031a)

**RECENT CERTIFICATIONS**

* **Big Data - Hortonworks Certified Associate (HCA)**
* **AWS Technical Professional (Digital)**
* **AWS TCO and Cloud Economics (Digital)**
* **AWS Cloud Practitioner Essentials (Digital)**

**PROFILE SUMMARY**

* Over 18 years of experience in Architecture, Consulting, Design, and Implementation.
* Experience in AWS Services, Digital Transformation, and transforming legacy architecture towards micro services architecture.
* Expertise in design and implement Data Lake solution in AWS with Microservices as data accessing layer.
* Design modern streaming ETL using Kafka and Spark.
* Expertise in Big Data and Cloud Data Management Disciplines, Data and Information Architecture Frameworks and Maintaining Governance activities
* Define, Manage and Govern Enterprise Data Architecture targeting how Business data and information is stored, consumed, integrated and managed by different data entities and IT systems, as well as any applications using or processing that data in some way for Corporate objectives.
* Experience in creating Enterprise level Contextual, Conceptual, Logical Data Model using industry-standard (e.g. ACCORD) concepts and broaden the concept to meet Enterprise's business requirements, with added flexibilities and scalabilities
* Modern Data Architecture frameworks and Best Practices.
* Domain knowledge on Insurance, Banking and Telecom.
* Data Security principles and best practices

**TECHNICAL SKILLS**

**AWS:** Redshift, EMR, S3, Kinesis, DMS, Dynamo DB, DMS, Athena, API Gateway, Cognito, Elasticsearch, Network (VPC) and Securities.

**Azure:** Data Lake ADLS, U-SQL, SQL DWH, Poly Base, Databricks, Data factory.

**GCP:** Dataproc, Dataflow, BigQuery, Bigtable, Pub/Sub

**Big Data:** Hadoop, Spark, HBase, Hive, Kafka, Nifi, Parquet, Avro, Pig, Sqoop, Oozie, Atlas, Ambari, BigInsights, Big SQL.

**NoSQL:** HBase, MongoDB and DynamoDB.

**DevOps Tools:** GitHub, Jenkins, Liquibase, Datical, Ansible, CloudFormation, AWS Landing Zone, AWS Organization, AWS Native CI /CD pipelines.

**Data Management Discipline:** Data Modelling, Data Migration, Application Database, Enterprise Data Warehouse, Data Mart, MDM design, Corporate Governance, IT Governance, Data Governance, Data Architect, Data Analyst, Data Integrator, Data Profiling, Data Cleansing, Data Staging, Data Stewardship, Metadata management.

**Framework:** Master Data Management (MDM), The Open Group Architecture Framework (TOGAF), Zachman, and ACORD.

**Databases:** DB2 UDB, Oracle, MS SQL Server, MySQL, MongoDB, Netezza, Exadata & DB2 Purescale.

**ETL Tools:** Informatica PowerCenter, DataStage, SSIS, Pentaho & Talend.

**Modelling tool:** SQL Data Modeler, Infosphere Data Architect, Erwin 9.x

**BI Tools:** Cognos 8/10 Framework Manager, Report Studio, Eclipse BIRT, Pentaho BI Suite (Metadata Designer, Report and Dashboard designer), SSAS, SSRS, Power BI & Tableau.

**Enterprise IT Asset Management:** IBM Maximo (TAMIT and CCMDB), TADDM, TAD4d, TDI, and TCR.

**Scripting:** Power shell Script, JavaScript, VBScript and UNIX Shell Scripts, PERL and Python.

**Big Data:** Hadoop, Kafka, HBase, Hive, Pig, Sqoop, Oozie, Atlas, Ambari. BigInsights, Big SQL, BigSheets.

**Agile Project Management Tool:** JIRA, Atlassian and BitBucket.

**ECM:** IBM FileNet

**System Admin:** Linux, Sun Solaris Server, AIX and Windows.

**JOB PROFILE**

|  |  |  |
| --- | --- | --- |
| **Employer** | **Designation** | **Period** |
| **Group Nexus** | **Senior Big Data & Cloud Solutions Architect** | **Jan 2019 – July 2019** |
| **Cognizant (CTS)** | **Senior Enterprise Data Architect** | **Sep 2014 - Jan 2019** |
| **Computer Sciences Corporation (CSC)** | **Principal Consultant** | **Aug 2007 - Sep 2014** |
| **Verizon Data Services (VDSI)** | **Senior Database Administrator** | **Aug 2005 - Aug 2007** |
| **Standard Chartered Bank** | **Database Administrator** | **Jan 2005 - Aug 2005** |
| **White House Business Solution** | **Oracle Application DBA** | **Dec 2003 - Jan 2005** |
| **Vellore Institute of Technology** | **Oracle DBA /System Administrator** | **Feb 1999 - Nov 2003** |

**WORK PROFILE**

|  |  |  |
| --- | --- | --- |
| **Group Nexus -UK** | **Senior Big Data & Cloud Solutions Architect** | **Jan 2019 – July 2019** |

**Project 1: Escrow - Data Analytical platform with Microservices for End user’s consumption.**

**[AWS Data Lake: Glue, EMR – Spark, DMS, Athena, API Gateway, DynamoDB, Cognito & Lambda]**

**Responsibilities:**

* Designed and provided End to End solution to build Data Lake Platform with Microservices to consume the curated data in Parquet format by third party consumers though secured API.
* Provided the design and solution to Migrate Azure Data (Structured and unstructured) to AWS using DMS and rclone.
* Designed and provided solution to Integrate Azure Operational Data Platform with the New AWS Data Lake for structured and unstructured data.
* Orchestrated the Integration and ETL jobs using Cloudwatch, SNS, Lambda and Step functions.
* Designed the ETL using Spark to dedupe and transform the data in Parquet format with Images in base64.
* Designed and solutioned the Microservices using Lambda (Python boto3) to access Parquet data using Athena using Glue catalogued tables.
* Designed the security for Microservices using Cognito for Authentication, Authorization & Tokenization and integrated Cognito with API Gateway.
* Designed Data lake Network with VPC, VPC NACL, S3 and Lambda with VPC Endpoints. Configured custom subdomain in API Gateway and Route53.
* Designed and implemented AWS Landing zone with Organization.
* Recruited, build and managed the Engineering team consists of Data Engineers, Microservice developers and DevOps Lead to deliver the project.

**Project 2: Nexus – Operational Digital Platform for Modern Car Park Mgmt. and Data Monetization.**

[AWS Platform: Control Tower, MSK Kafka, EMR Spark Clusters, Redshift, Glue, Power BI, ECS, Fargate , App Mesh, API Gateway , Cognito and DynamoDB ]

**Responsibilities:**

* Architected and provided End to End solution for Next Gen Digital Platform for Car Park management and Data Monetization on AWS Platform and delivered (HLD) High level Design Document.
* Chaired TDA (Technical Design Authority) meetings with CTO, other Architects and technical staff from third party vendors.
* Owned all KDDs (Key Design Documents) for Architectural design changes. Coordinated with AWS Solution Architects to peer review the designs.
* Conducted Technical workshops with other service integrators.
* **IoT and Ingestion Layer:** Designed the Ingestion layer to Push and Pull the IoT data from ANPR Cameras, Consoles, Kiosk and EPOS from On-Prem to AWS Cloud platform using Kafka and Kafka connect and AWS API Gateway. Designed Kafka Topics and Partitions.
* **Near Real time Processing Layer:** Designed the near time processing layer using Spark Streaming Data pipelines and provided the algorithm to process and persist the processed data in No-SQL database (DynamoDB).
* **Data Model:** Modelled No-SQL data model for IoT and Application stack for DynamoDB. Analytical Data Mart solution using Redshift.
* **Microservices:** Designed the Microservices for Permit, Payment and Enforcement application using AWS microservices stack using ECS, Fargate, App Mesh along with Cognito for Authentication and Authorization and API Gateway.
* **DevOps Architecture:** Provided solution on using AWS native DevOps stacks using CodePipeline, Codebuild, Codedeploy and Cloudformation along with Github integration and designed the Git flow.
* **Cloud Security:** Provided design solution for Cloud Security on Network using VPC, NAT and Bastion servers and Access and User management using Cognito, Organization, SCP (Security control policies) and GuardDuty.

|  |  |  |
| --- | --- | --- |
| **Cognizant (CTS) - UK** | **Senior Enterprise Data Architect** | **Sep 2014- Jan 2019** |

**Project 1:** Implement near real time monitoring and analytics on user activities in Policy and Claim Registration Portal using Application and Server logs to analyse Fraudulent activities and to enhance Marketing strategy.

**[Hortonworks Data Platform - Hadoop, Spark Streaming, Kafka, Hive, HBase & Oozie]**

**Role: Big Data Solution Architect**

**Responsibilities:**

* Provided Strategic Road map to design, develop, test and deliver the on premises solution on Real time monitoring and analysis.
* Delivered Ingestion Framework for Real-Time Data collection using Kafka and Spark Streaming sourced from Application and Server logs and Persist on HDFS in Parquet Format.
* Designed Hive Tables on Parquet Files to be consumed on ML, analysis and metrics Layer.
* Designed transformation layer using SparkSQL API and Spark Streaming before persisting layer in HDFS.
* Helped Development team to write Complex Spark UDFs for the transformation on Hive tables using Scala.
* Designed Oozie Orchestration Framework for Job Scheduling.

**Project 2: Enterprise Data Warehouse on AWS**

Enterprise Data Strategy to cater the requirement to have organizational holistic Metrics and Predictive analytics. **[AWS S3, EMR, Redshift, Tableau & Talend]**

**Role: Data Architect**

**Responsibilities:**

* Provide Strategic Road map to design, develop, test and deliver Enterprise Data Warehouse solution in AWS Cloud.
* Delivered Holistic Data Model to integrate different Data Mart Silos.
* Delivered Conceptual and Logical Data Model for Enterprise Data Warehouse on Redshift.
* Best Practices on Talend Data Integration Framework to ingest disparate data sources both Structured and semi structured.
* Delivered PoC results, Sample code Documentation and Best Practices on AWS S3 and EMR.
* Delivered ETL framework using Amazon EMR and Best Practices.
* Delivered Framework for Metadata management, Business Glossary, Semantic layer using H-Catalog/AWS Glue.

**Project 3: Work view** [Web based application for Policy, Claim, Billing, Remittance, Customer Interaction and Complaints Business process along with Content Management]

**[DB2 UDB on AIX, Erwin Data Modeler, Master Data Services (MDS) and SQL Server 2008, SSAS, SSIS, SSRS, Netezza and Cognos, FileNet P8]**

**Role: Enterprise Data Architect**

**Responsibilities**

* Design and developed Common Global Data Model that caters the requirement for 56 individual Countries spread across 3 Regions (EMEA, APAC and LATAM).
* Global Data Model consists of sub data models for Security, Data Integration, Data Ingestion, BI /MI and FileNet Case solution modelling (Object modelling) and Document Meta data Class model.
* Best Practices on DB2 Administration and Deployment.
* Data Model for Master Data Management (Reference and configuration Data).
* Define the strategy for Master Data Management.
* Database architecture solution for High Availability and Replication.
* Data Model for MI using Dimensional Modelling.
* Design the solution for Data Integration Components Downstream and Upstream systems.
* Solution for Data Migration from legacy system to Workview which consists of Forward Mapping Designing Stage Database, ETL workflows using Informatica.
* Designed the solution for Interim MI: It’s a Data wrangling project to reverse engineer Work view data to fit into legacy Data Marts on Netezza, SQL Server /SSAS and Hyperion.
* Designed the Production Database stack LPARs, Storage subsystem and Clusters. With minimum configurations and parameters.
* Technical support on Data space to Subprojects of Workview: CGM, Work view EMEA Finance, APAC Finance and Work View North America.

**Project 4: Underwriter Portal for Insurance – Property and Casualty Line of Business.**

**[DB2 UDB on AIX, Erwin Data Modeler, Master Data Services (MDS) and SQL Server 2008, Netezza and Cognos]**

**Responsibilities**

* Best Practices on DB2 Administration and Development for RISK Databases.
* Data Modelling using Erwin Data Modeler for Casualty and Property RISK Databases
* Performance Tuning of the Database and Queries
* Migrate and enhance Underwriter Capacity Calculation Stored Procedure.
* Master Data Management:

o Data Model for Master Data Management using MDS.

o Design Entities, Hierarchies, Relationships and Data Management

o Streamlined the process of Data Management

o Automate the Data load using ETL process using staging.

o Performance tuning of MDS

o Provide Technical Solutions to ETL and Reporting team.

* Lead the Data team.

|  |  |  |
| --- | --- | --- |
| **Computer Sciences Corporation (CSC), Chennai** | **Principal Consultant** | **Aug 2007 – Sep 2014** |

**Project 1: Enterprise IT Asset Management solution.**

**[IBM Maximo [TAMIT & CCMDB], DB2 9.x, MS SQL 2008, WAS, Cognos 8.4.1, BIRT and InfoSphere Federation server]**

**Role: Consultant on Database, Business Intelligences and Data Integration.**

**Responsibilities:**

* Architect, Install/Upgrade and Configure Maximo (TAMIT and CCMDB), TADDM, TAD4d and TCR and middle wares DB2, WebSphere Application Server, Tivoli Directory Server and Websphere Federation Server. Fix pack and Hot fix Installation.
* Performance tuning on database and query tuning for report and queries.
* Responsible for Database Schema changes for Customization and Integration - Maximo Database Configuration and Data Loader
* WebSphere clustering to separate Reporting load on Application using BROS solution on Linux.
* Automate Database backup, restore and maintenance and housekeeping solution using shell script.
* Provide steps and best practices on DB2 upgrades DB2 migrations like 32 bit to 64 bit for various RCCM products.
* Document DB2 Administration Best practices for RCCM suite of products and keep them abreast to latest versions and standards.
* Production support for various database issues, data extracts and report related issues.
* Design and Develop new reports based on requirement using Cognos and BIRT.
* Design and develop Interface Control Document (ICD) and implement data extracts for RCCM products like TADDM, TAD4D, TAMIT and CCMDB with DB2 database federation to Data Warehouse solutions like Flexera, Blazent , SAMDW, AMI, Remedy and VASS Billing systems based on ETL requirement.
* Work with various RCCM product SME’s and Business Analyst to understand their requirements and business needs on custom reports, KPI and Dashboards and Design and develop reports using Cognos 8/10(Framework Manager, Report and Query Studio) and BIRT.
* Expert in Cognos Report Server and Tivoli Common Reporting server Administration and Architecting.
* Working knowledge on MEA/MIF, Application Designer, Workflow, TDI and ITIC.
* Familiarity with architectures for reference and master data management.
* Familiarity with the integration architecture for integrating Maximo with other third-party vendors such as SAP, planning and scheduling systems.

**Project 2: CA Automation Suite for Data Centre.**

**[MS SQL 2008/2012, CA Automation Suite, Business Objects and Flexera FNMP]**

**Role: Database Lead.**

* Responsible for Automating SQL Server Database Deployments (2008/2012) using PowerShell Script for Puppet configuration management solution.
* Planning, Installation using Configuration files, Security Settings, Backup and Restore

**Project 3: Decision Support System for automation (BDSSA)**

**[DB: MS SQL Server, IBM Cognos 8.4.1, ETL: Oracle Data Integrator]**

**Role: Solution Architect**

* Re-Engineer to build Virtual Appliance of the Data warehouse solution with customization.
* Design and customize Data Models (Database and Cognos) as per the requirements.
* Database maintenance scripts for Backup, Restore and Clean-up.

**Project 4: Business Intelligence Reporting**

**[Cognos 8.4 (Report Studio, Framework Manager, Cognos Administration, Query Studio), Eclipse BIRT, TCR 2.x, Linux, DB2 v9.x]**

Providing end to end support and work on the Reporting Solutions for Software and Hardware Discovery tools (TADDM and TAD4d) and IT Asset Management (Maximo TAMIT / CCMDB) needed by various Accounts of RCCM Solutions.

**Responsibilities**

* Gather the requirements from Business Analysts of Asset Management and transform them into technical specifications.
* Create the logical data model based on the business and functional requirements
* Design the Framework model as per Cognos best practices.
* Maintenance of Development, testing and production environment for Cognos Servers
* Maintaining and implementing system security on Cognos environment.
* Maintenance and enhancement of Cognos Framework Data Models and reports.
* Configure Cognos to save the schedule report/extracts in OS File system and automate to transfer it to centralized JIT server
* Identify the artefacts by making use of guidelines in IBM Business Intelligence Methodology
* Ensured proper scheduling and administration of Cognos connection
* Make sure that the existing reports are running fine without any issues.
* Apply performance tuning techniques to enhance the performance.
* Fix the error condition that caused the report/extract to fail
* Install, Upgrade, Fixpack installation and building Virtual Appliance of TCR 2.x

|  |  |  |
| --- | --- | --- |
| **Verizon Data Services (VDSI), Chennai** | **Senior Database Administrator** | **Aug 2005 - Aug 2007** |

**DB2 UDB on Linux/AIX/Windows**

**Role: Production Support Lead DBA Applications Supported:**

**Production and Non-Production**

* FTTP-vECAP (Verizon Enhanced Application People) - DB2 v8.1/8.2 on SUN Solaris.
* FTTP-VCOLLECT (Verizon COLLECT) - DB2 v8.1/8.2 on SUN Solaris.
* HBI (Host Billing Interface). – DB2 V7.1 on AIX.
* EDRS (Enterprise Data Reporting System) – Data Warehouse – DB2 V7.1 on AIX.

**Non-Production**

* SSP – Oracle 9i/8i on SUN Solaris.

**Responsibilities:**

* Sole responsible for the production databases on SUN Solaris and AIX Servers.
* Install, Upgrade and configure DB2 UDB v8.1/8.2 on SUN Solaris and AIX.
* Create Instances and databases and configure them for Production and DR Environment as well as for STG, UAT, SIT, DIT and DEV servers on SUN Solaris and AIX.
* Configure and Administer SQL Replication and Q - Replication on DB2 UDB.
* Configure and Administer HADR on DB2 UDB for Prod Environment.
* Designed and Implemented VCS for DB2 UDB Instances and Databases (VERITAS Cluster Server) on SUN Solaris for Prod and Staging servers.
* Configured and Administrating VERITAS NetBackup for DB2 UDB for Database online backup as well as for log archiving using User Exit.
* Installing Fix packs on production and DR servers.
* Install, configure and troubleshoot IBM DB2 Recovery Expert on production servers.
* Periodically analyse tables and indexes using RUNSTATS and REORG for required tables and indexes. Analyse and solve lock escalations, package cache overflow and catalogue cache overflow in production databases.
* Performance tuning: Tuning Instance and database level parameters and as well as Registry variables and SQL tuning for the Production costly queries.
* Online and Offline Backup and Restore of all Production and DR databases.
* Design, implemented and maintained ETL Script jobs using Export and Load/Import on Production databases.
* Gave Support to development team and Testing Team on query tuning, preparing DDL data patch and troubleshooting all database related issues.

|  |  |  |
| --- | --- | --- |
| **PREVIOUS EXPERIENCE** | | |
| Scope International (Standard Chartered Bank) | Production DBA | Jan 2005 – Aug 2005 |
| White House Business Solution | Oracle Application DBA & Technical Consultant | Dec 2003 - Jan 2005 |
| Vellore Institute of Technology, Vellore | Oracle DBA/System Administrator | Feb 1999 - Nov 2003 |

|  |  |  |
| --- | --- | --- |
| **EDUCATION** | | |
| Master’s Degree in Information Technology. M.Sc. (IT) | Alagappa University | 2001- 2003 |
| Bachelor of Mathematics. B.Sc., Voorhees College | University of Madras | 1992 - 1995 |

|  |
| --- |
| **TECHNICAL CERTIFICATIONS** |

* IBM Big Data Fundamentals Technical Professional v1
* IBM InfoSphere Big Insights Technical Professional v2
* IBM Information Management DB2 10 Technical Professional v3
* IBM InfoSphere Warehouse Technical Professional v1
* IBM Information Management DB2 10 Pure Scale Technical Professional v2
* IBM Netezza Technical Mastery Professional v1
* IBM Certified Database Associate - DB2 v10.1
* IBM Certified Deployment Professional - TADDM V7.1
* IBM Certified Database Associate on DB2 V8.

|  |
| --- |
| **TECHNICAL TRAININGS** |

* IBM Advanced DB2 UDB Administration on Linux and Windows.
* IBM DB2 v10 Pure Scale
* IBM InfoSphere Warehouse 10
* Oracle RAC
* IBM DB2 v10 for Linux, UNIX and Windows
* IBM Maximo Asset Management for IT v7.1
* IBM Maximo Change and Configuration Management Database v7.1
* IBM Tivoli Application Dependency Discovery Management v7.2
* IBM Tivoli Asset Management for IT 7.2 Fundamentals
* IBM Tivoli Reporting for Enterprise IT and Asset Management
* IBM Maximo TPAE
* VMware vSphere Administration
* Red Hat Linux System Administration RH133
* Oracle DBA [SQL Star International P. Ltd. (Oracle Authorized Education Centre)]