Vinay Ambalihalli

Sr. Manager, Data Engineering

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Seasoned full-stack data professional with 15+ years in IT. Expertise in Data Engineering, EDW Architecture, CRM Apps, and BI solutions. Strong experience in managing Data Engineering and BI teams, creating roadmaps, conducting sprint planning, and overseeing delivery. Proficient in programming, SDLC methodologies, product management, and audit compliance.

Work experience

eHealth Inc - Santa Clara, CA
MAR 2020 - CURRENT

Sr. Manager, Data Engineering

Lead Data Engineering team of six members in building solutions to enable BI Reporting and Data Science Requirements. Adept at comprehending and addressing data solutions for finance, membership, marketing, revenue operations, and partner teams at eHealth.

- Lead the migration of on-prem **Oracle** DW to the Snowflake EDW. Migrated legacy the **WhereScape** ETL jobs and orchestrated jobs in **Matillion** and **Databricks**.
- Designed **data pipelines** to ingest data from upstream systems, rest **APIs**, and **Kafka** streams to the data lake. Transformed and loaded the data to the **Snowflake EDW** to create actionable insights.
- Orchestrated **event-driven jobs** using **AWS Lambda, S3,** and **SQS,** Redesigning the legacy processes to improve the performance, SLA times, to optimize resource utilization and cost.
- Realtime Kafka data streaming from the Microservices to the data lake and the data marts design.
- Collaborated on developing the ML model to unify customer data using **H2O.ai** and **Databricks**, to enhance Customer 360 DataMart and build customer journey reports.
- Migrated data models and reports from **Tableau** to **LookML** to utilize **self-service reporting** capability.
- Managed comprehensive **technical project documentation** using Confluence to address enterprise-wide data catalog requirements. Assisted the **data governance** team in establishing a central repository.
- Ensured **data integrity** in CORE membership and financial data as subject matter expert in resolving financial, membership, marketing, revenue ops, and partner data.
- Plan **bi-weekly sprints** and JIRA board, and lead the daily **standup calls** for the Data Engineering team to identify the roadblocks, and track progress.
- Designed EDW Architecture and Data products ensuring adherence to the SDLC process and EDW design for SOX requirements.
- Incorporated data engineering **best practices** to improve prod availability and **Audit Compliance**.

Technical Stack: SQL, Python, AWS Lambda, S3, SQS, Snowflake, Matillion, Databricks, AWS EC2, Attunity, Airflow, Shell Script, Kafka, MongoDB, Looker, Tableau, Prometheus, Grafana, Kubernetes, and Docker.

Kaiser - Pleasanton, CA
MAR 2017 - MAR 2020

Data Architect, Project Lead

Reporting to the Director of Pharmacy IT Operations, where responsibilities included identifying potential leads in Pharmacy Care Delivery practice, delivering IT solutions and business value adds, leading Business Intelligence (BI) and Data Warehouse (DW) Onshore - offshore team.

- Design and development of data pipelines, facilitating the seamless integration of diverse data from upstream systems into the **Enterprise Data Warehouse**. Focus on enhancing Data Marts to effectively support critical **Pharmacy** business services.
- Build data ingestion framework to extract data from heterogeneous databases and flat files across multiple locations into the **Hadoop** landing zone. Developed data pipelines using **PySpark** and **Sqoop**.
- Automation of dynamic report generation and email notification using **PL-SQL procedures** and **shell scripts**. This initiative enhances operational efficiency and ensures timely dissemination of critical insights to business and L1.5 support.
- Successfully implement **Airflow** to orchestrate **DAGs** and manage Pharmacy Data Warehouse (PDW) jobs, thereby optimizing workflow efficiency in scheduling and monitoring.
- Architect a **CRM-Business Intelligence** framework catering to **KP International** Leadership. Enable tracking of programs, management of contacts and institution information, and analysis of GL data. Provide advanced capabilities, such as tracking potential leads, capturing confidence scores (CS), managing program alerts, and facilitating speaker notifications. Utilizing services such as **Azure**, **Oracle Apex**, **Tableau**, and **Airflow** to achieve seamless integration and functionality.
- Implemented **Airflow** for Pharmacy Data warehouse jobs and converted cron jobs to Airflow DAGs.
- Created **Tableau site** and built reports for ASG operations, leadership reports for Pharmacy and Care Delivery, and downstream consumers.

Technical Stack: SQL, PL-SQL, Python, BigData - HDFS, Sqoop, Oracle, Oracle Apex, Informatica, Azure, Git SCM, Shell, SoapUI, Tableau, OBIEE, and Airflow.

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Trane - La Crosse, WI

SEP 2016 - FEB 2017

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Data Architect, DW & BI Solution Architecture

Conducting a comprehensive project assessment and developing a strategic roadmap for the migration of legacy Data Warehouse systems and associated reports to integrate seamlessly with the Enterprise Data Lake, establish a scalable architecture for the Enterprise Data Warehouse, and implement a cutting-edge Business Intelligence platform. This initiative aligns with the overarching goals of Data Architecture and Business Intelligence solution design.

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- Evaluation of legacy reports utilizing **survey questionnaires** to categorize reports based on business use cases, report features, subject area, and data security considerations.
- Identified critical data elements and source systems to inform the development of the data lake and data marts.
- Designed and implemented Proof-of-Concept solutions utilizing **Tableau, OBIEE, BI Publisher, Azure Server, PL-SQL,** and **Shell Scripting** to validate the feasibility and efficacy of proposed data architectures.
- Orchestrated the design of a Business Intelligence (BI) framework, ensuring a **seamless transition** and optimal **user adoption** from the **Legacy Actuate BI system to the new BI ecosystem**.
- Facilitated **user demo** and **hands-on training** sessions showcasing new solutions, including features such as report drill-down, guided navigation, selection steps, agents, security enhancements, and burst reports. Provided a comprehensive overview of the new To-Be Architecture design.
- Developed baseline for **project sprint plans**, **effort estimations**, and **resource mapping** to ensure effective project management and successful implementation of the initiative.

Technical Stack: SQL, PL-SQL, Tableau, OBIEE, BI Publisher, Shell Scripts, Oracle, HBASE, and Actuate BI.

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Belk - Charlotte, NC

MAR 2013 - SEP 2016

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Manager, BI & Data Engineering

Overseeing the development of the retail data warehouse, implementing ETL & BI solutions, managing project planning and delivery, and leading a diverse development team comprising eight members, both onshore and offshore.

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- Collaborated closely with **Merchandising** and **Finance** business users to elicit requirements, formulate user stories, and conducted thorough analysis for Datamart and report design.
- Utilized the **Informatica** ETL tool to construct robust data pipelines, facilitating the loading of data from diverse upstream sources into both Oracle and custom databases.
- Developed and implemented **PL-SQL procedures** to ensure the timely refreshment of report tables, maintaining accuracy and relevance.
- Implemented efficient **data ingestion** and **transformation** processes within the Enterprise Data Warehouse (EDW), prioritizing and upholding data integrity standards.
- Automation of store report generation using a comprehensive toolkit, including **Oracle BI Publisher, PL-SQL** stored procedures, **WSDL services**, **shell** scripts, and **Autosys**.
- Led the implementation and administration of **Tableau**, covering tasks such as binary installation, configuration, scale-out services, and performance tuning to optimize the platform's functionality.
- Created project **cost assessments**, **resource** estimation, and **project sprints**.
- Conducted **cross-train** sessions in team to skill up in latest technologies and host **team building** activities.

Technical Stack: SQL, PL-SQL, Oracle RMS, Oracle BI Publisher, Tableau, Oracle, Shell Scripts, Autosys, HP Load Runner, and Dynatrace

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TIAA - Charlotte, NC

NOV 2008 - DEC 2012

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Senior Software Engineer, BI & DW

Responsible for overseeing enhancements to the Enterprise Data Warehouse (EDW) and implementing new data integration.

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- Successfully implemented the integration of **Oracle BI Finance Apps** with **Siebel** CRM app, ensuring seamless interoperability.
- Orchestrated **Data pipelines** in **Informatica** to facilitate the extraction and transformation of CRM data for seamless integration into the **EDW**.
- Architected Data Mart's and BI Subject in **Oracle BI Apps** specifically tailored for comprehensive financial reporting. Designed the BI Subject Area in OBIEE for financial reporting.
- Engineered **ERISA CRM-BI** Solution to manage, review and approve institutional plan life cycle.
- Led **data modeling** design, defining facts and dimensions, designing dimensional hierarchies, creating level-based measures, and establishing aggregate views. Successfully built Data Marts from the ground up.
- Proficiently **administering**, **horizontal-vertical scaling**, and **upgrading** BI servers based on needs and optimal system performance.
- Implemented secure BI report authentication mechanisms using **LDAP** and **SAML 2.0,** thereby establishing **Single Sign-On (SSO)** for enhanced security and user convenience.

Technical Stack: OBIEE, BI Publisher, Informatica, OC4J, WebLogic, Siebel CRM Finance, Oracle Finance and HR Analytics, Siebel CRM, Oracle and Teradata.

| **Cognizant**

SEP 2005 - OCT 2008 |

Senior Software Engineer, DW-AIA Practice

Worked as Siebel CRM-BI-DW consultant for diverse clientele spanning North America and the Asia Pacific, catering to multiple industry domains such as Healthcare, Retail, Insurance, Finance, Logistics, and Media that includes industry leaders like DHL, Cbeyond, Franklin Templeton, and The New York Times.

- Implement comprehensive **CRM-Data Warehouse-Business Intelligence** solutions, ensuring a holistic approach to meet client needs.
- Designed and presented **Proof-of-Concept** solutions, conducting client demo for new leads as part of **DW-BI Center of Excellence** practice to showcase capabilities and incorporate new tech. solutions.
- Leveraged expertise in **Oracle ERP** products and **Oracle Fusion Applications** to deploy, tailor, and elevate data marts across varied functional domains, encompassing **Financials**, **HR**, **Call-Center**, and **Marketing**.
- Implemented Data Warehouse solutions and automated processes using **SQL**, **Shell** Scripts, and **Python**, ensuring efficiency and accuracy in data handling.
- Managed **OBIEE** binaries installation and patching, administered BI Servers, and implemented horizontal and vertical scaling. Integrated BI solutions with SharePoint sites, enabling site root certificate and configuring **Single Sign-On (SSO)** through Kerberos/SAML 2.0 based network authentication.
- Functioned as a **product design engineer** for a proprietary tool Beehive that tracks trends in service requests, incident tickets, and resource utilization.
- Worked as a product design engineer for the proprietor tool that tracks trends in Service requests, incident tickets, and resource utilization for project and resources planning.
- Remediated product bugs by collaborating with product vendors like **Oracle**, **Tableau** and **Microsoft** support, ensuring the ongoing stability and performance of deployed solutions.
- Conducted training sessions for new team members, delivering comprehensive instruction on **CRM**, **Data Engineering**, and **BI** tools.

Technical Stack: SQL, Shell, Oracle BIEE, Oracle BI Publisher, Hive, Sqoop, Informatica, ODI, Linux, AIX, and Windows Servers.

Technological Proficiency

- **Data Integration**: *Matillion, Databricks, Informatica, PL-SQL, Oracle SQL loader, and Sqoop*
- **Business Intelligence**: *Tableau, Looker, Oracle BI Apps, BI Publisher, MSTR, and DOMO*
- **Programming**: *SQL, Python (pandas, NumPy, SciPy, H2O, and Scikit-learn), R, Shell, HTML - JavaScript, Java and C++*
- **IDE**: *Jupyter Notebook, PyCharm, Visual Studio Code, R Studio, Eclipse, SQL Developer and TOAD*
- **Data Modeling**: *Erwin, Draw.io, and MS Visio*
- **Database**: *Snowflake, Oracle, MongoDB/ AWS Document DB, Teradata, SQL Server, MySQL, Flat files, and Hadoop*
- **Project Tools**: *JIRA, Confluence, CA SCM, Git, MS SharePoint, Visual Source Safe, HPQC*
- **Operating System**: *Red Hat Enterprise Linux, IBM AIX, UNIX and Windows Server 2012 R / Azure, and AWS Cloud Servers. Prometheus, Grafana, Kubernetes and docker.*

Education

Product Management Program, Stanford University
Develop product requirements and formulate a positioning strategy. Create financial plans and data-driven strategies to foster the growth of your product. Produce a Product Requirements Document (PRD/spec) and a product roadmap.

Bachelor of Engineering | BVB College of Engineering & Technology
Specialized Subjects: Relational Database Management System (RDBMS), Object-Oriented Programming, Operating System, Computer Communication Network, Engineering Mathematics, and Communication Systems.

Certificate -
- Advanced Developing on AWS
- Developing on AWS
Oracle Business Intelligence Enterprise Server Architect