

AKHIL DEVABHAKTHUNI

Senior Data & Analytics Engineer

Power BI | Semantic Modeling | Cloud Analytics Analytics Engineering

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Summary

- Senior Data & Analytics Engineer with 9+ years of experience building scalable, enterprise-grade analytics platforms across Azure, AWS, and Microsoft Fabric.
- Expert in Power BI, including semantic modeling, advanced DAX, incremental refresh, and object-level security, with a strong track record of delivering executive dashboards and governed reporting solutions that support data-driven decision-making.
- Specialized in designing end-to-end cloud analytics platforms, including ETL/ELT pipelines, lakehouse architectures, dimensional modeling, and semantic layers optimized for reporting and self-service analytics.
- Experienced in modern analytics engineering practices spanning cloud data platforms, analytics modernization initiatives, KPI governance, and executive reporting.
- Combines deep technical expertise with strong business and stakeholder alignment to build analytics systems that are scalable, reliable, and decision-focused.

Professional Experience

Senior Analytics Engineer

MetricMend | Oct 2025 – Present

- Designed and developed an end-to-end analytics platform combining data engineering, semantic modeling, business intelligence, and AI-driven analytics capabilities.
- Designed a modern lakehouse-style analytics framework using Databricks and medallion architecture (Bronze, Silver, Gold) to support scalable reporting, governed metrics, and self-service analytics.
- Built data ingestion, transformation, and dimensional modeling pipelines to deliver curated analytics datasets optimized for executive reporting and business decision-making.

- Designed and implemented a governed semantic layer that standardized KPI definitions, business metrics, and reporting logic across analytics workflows.
- Developed AI-assisted analytics experiences enabling natural-language business questions, conversational follow-up analysis, automated KPI summarization, and insight generation.
- Built scalable analytics services integrating cloud data processing, API orchestration, semantic modeling, and visualization workflows into a unified decision-support platform.
- Implemented role-based access controls, approval workflows, and governance mechanisms to ensure secure and trusted analytics consumption.
- Designed a flexible analytics execution framework capable of supporting multiple processing engines, scalable compute patterns, and evolving business requirements.
- Developed full-stack platform architecture spanning frontend applications, backend services, analytics APIs, semantic models, and cloud-based analytics workflows.
- Deployed and maintained a production analytics application demonstrating modern Analytics Engineering, AI-assisted BI, semantic layer design, and enterprise reporting best practices.

Senior Analytics Engineer

MetricMend | Apr 2025 – Sep 2025

- Designed and implemented a **production-style AWS lakehouse architecture** using Amazon S3 with **Bronze, Silver, and Gold layers** for scalable analytics processing
- Built **incremental data ingestion pipelines** using Python (pandas, boto3, awswrangler), enabling efficient handling of continuously arriving datasets
- Structured raw data ingestion into **append-only Bronze layer with timestamp-based partitioning**, ensuring replayability and auditability
- Developed transformation pipelines to standardize and cleanse data into **Silver layer**, applying schema enforcement and data quality checks
- Engineered **Gold-layer star schema datasets (fact & dimension tables)** optimized for analytical workloads and BI consumption
- Implemented **data partitioning and Parquet optimization strategies**, significantly improving query performance and reducing scan costs in Athena
- Configured **AWS Athena external tables and metadata layer**, enabling serverless SQL querying over S3-based datasets
- Designed **data modeling strategy aligned with BI consumption**, ensuring seamless integration with Power BI dashboards
- Integrated Athena with Power BI to deliver **interactive dashboards powered by cloud-hosted analytics data**
- Built reusable **S3 ingestion utilities and modular ETL components**, improving pipeline maintainability and extensibility
- Applied **data engineering best practices** including modular pipeline design, separation of layers, and clear data lineage

- Simulated **real-world enterprise use case (sales analytics)** including customers, products, orders, and revenue metrics

Senior Data & Analytics Engineer

Promethean World | Oct 2022 - Mar 2025

- Led enterprise modernization of analytics platform, migrating legacy **SSIS ETL** → **Azure Data Factory** → **Microsoft Fabric**, improving scalability, reliability, and maintainability
- Designed and implemented a **cloud-native data platform architecture** using Azure and Microsoft Fabric, establishing standardized ingestion, transformation, and analytics layers
- Built and managed **Bronze / Silver / Gold lakehouse architecture**, enabling scalable and structured data processing for enterprise analytics
- Developed and optimized **ADF pipelines and Fabric Data Pipelines/Dataflows Gen2** with parameterization, triggers, and robust error handling to reduce operational failures
- Architected and owned **end-to-end cloud data platform**, including ingestion, transformation, storage (OneLake), and analytics consumption layers
- Built and owned **Power BI semantic models and executive dashboards** used by Sales and Marketing leadership for decision-making
- Developed advanced **DAX measures and time intelligence logic** (YTD, rolling 12 months, YoY comparisons, pipeline trends)
- Implemented **incremental refresh and dataset optimization**, significantly improving dashboard performance and scalability
- Designed **enterprise-grade reporting solutions** with **role-based security (RLS)** and governed datasets
- Enabled **self-service analytics** by publishing certified datasets and reusable semantic layers across business teams
- Designed **star-schema data models (fact & dimension)** to support scalable reporting and semantic layer consistency
- Migrated legacy **Cognos reports** → **Power BI & Tableau**, improving reporting accuracy and user adoption
- Standardized **business KPIs across Sales and Marketing**, ensuring consistent metric definitions across reports
- Implemented **data governance practices**, including workspace management, dataset certification, and access control policies
- Mentored team members on **Azure Data Factory, Microsoft Fabric, and modern data architecture best practices**
- Partnered with cross-functional stakeholders (Sales, Marketing, Operations) to deliver **data-driven insights and reporting solutions**
- Owned **end-to-end analytics lifecycle**, from data ingestion to executive reporting and governance

Senior BI Engineer

KinderCare Education | Jan 2019 – Oct 2022

- Designed and built **enterprise-scale Power BI semantic models**, replacing legacy SSAS cubes using star-schema architecture
- Developed advanced **DAX measures and KPI frameworks**, including fiscal calendars, time intelligence (YTD, YoY, rolling periods), and business-driven metrics
- Built and maintained **Power BI datasets and Dataflows**, enabling scalable **self-service analytics** across multiple business units
- Implemented **incremental refresh strategies**, significantly improving dataset performance and reducing refresh times
- Optimized report performance using **DAX Studio, query tuning, and indexing strategies**
- Implemented **Object-Level Security (OLS)** and managed dataset-level access controls for secure enterprise reporting
- Designed and maintained **data validation and monitoring dashboards** to ensure pipeline accuracy and reporting reliability
- Established **governed reporting practices**, ensuring consistency in metric definitions and access control
- Designed and optimized **SSIS ETL pipelines**, supporting ingestion from OLTP systems into analytical warehouse environments
- Implemented **incremental data processing strategies** to improve pipeline efficiency and scalability
- Partnered with infrastructure and DevOps teams to **automate deployment pipelines** using Bamboo, Octopus, and PowerShell
- Improved reporting performance through **SQL tuning, indexing, and profiler-based optimizations**

BI Developer

KinderCare Education | Sept 2017 – Dec 2018

- Developed **SSIS ETL pipelines** to move data from OLTP systems into analytical warehouse environments
- Designed and deployed **SSRS reports** with dynamic parameters and matrix reporting features
- Built stored procedures, functions, and automation workflows to support reporting operations
- Contributed to **star-schema data model enhancements** to improve query performance and reporting consistency

TECHNICAL SKILLS

Analytics Engineering & Data Platforms

Microsoft Fabric, Azure Data Factory (ADF), Azure SQL, SQL Server, Databricks, AWS (S3, Athena), Lakehouse Architecture, Data Platform Architecture, Analytics Engineering, Data Warehousing, Data Pipelines, ETL, ELT, Data Transformation, Data Orchestration, Incremental Loading, Medallion Architecture (Bronze/Silver/Gold)

Business Intelligence & Reporting

Power BI, Semantic Models, DAX, Incremental Refresh, Object-Level Security (OLS), Row-Level Security (RLS), Tableau, Executive Dashboards, Executive Reporting, Self-Service Analytics, KPI Governance, Business Intelligence, Data Visualization, Dashboard Performance Optimization

Data Modeling & Semantic Layer Design

Star Schema, Snowflake Schema, Dimensional Modeling, Fact & Dimension Modeling, Semantic Layer Design, Semantic Modeling, Business Metrics Frameworks, KPI Frameworks, Data Mart Design, Analytics Data Modeling

Programming & Query Languages

SQL, T-SQL, DAX, Python, PowerShell

AI & Modern Analytics

OpenAI Integration, Conversational Analytics, Natural Language Query Processing (NLQ), AI-Assisted Analytics, AI-Driven Insights, Analytics Automation, KPI Summarization, Insight Generation

Tools & Methodologies

Agile (Scrum), Jira, Git, GitHub, Tabular Editor, DAX Studio, Data Governance, Stakeholder Management, Requirements Gathering