

ADITYA DESHMUKH

+1 201-893-2863 | aditya.deshmukh.cd@gmail.com | [LinkedIn](#) | [GitHub](#)

TECHNICAL SKILLS

Data Platforms & Tools: Palantir Foundry, Databricks, Apache Spark, Apache Airflow, AWS (S3, Redshift, Kinesis, PrivateLink), Snowflake, Azure

Programming & Query Languages: Python (PCEP Certified), SQL, PySpark

Architecture & DevOps: ETL/ELT Pipeline Design, Data Modeling, Real-time Streaming, Infrastructure as Code, CI/CD, System Architecture

Leadership: Cross-functional Team Coordination, Technical Mentorship, Incident Management, Stakeholder Communication

PROFESSIONAL EXPERIENCE

Senior Data Engineer | The Hertz Corporation (TCS), Chicago, IL

2023 – Present

Infrastructure Architecture & Cost Optimization

- Architected and implemented direct VPC Endpoint/PrivateLink connections for 10 critical data sources (Databricks, FileNet, AWS S3, Kinesis, MSSQL, JDBC), eliminating 3 monthly server patches and 36+ annual maintenance hours while supporting **70GB+** daily data ingestion for **10K+ active users**—reducing infrastructure dependencies and operational risk to zero.
- Reduced platform operational costs by **\$120K+ annually (\$10K daily savings)** through strategic resource optimization, compute profile tuning, and decommissioning legacy processes across **40+ production pipelines**
- Resolved 4 critical out-of-memory incidents through architectural redesign and compute optimization, reducing processing times by **60% (1hr+ builds to 20min)** and improving data availability SLAs for business-critical applications
- Established robust monitoring infrastructure with **200-300+** automated health checks across batch and streaming datasets, proactively preventing downstream failures and reducing mean time to resolution.

Cross-Functional Leadership & DevOps Transformation

- Led DevOps initiative to establish DEV/PROD environment separation within Palantir Foundry, affecting **15 use cases and 10K+ users** (developers and operations), implementing governance controls and structured deployment processes where none existed previously
- Orchestrated cross-functional collaboration across CloudOps, Global Compute, and Palantir Forward Deployed Engineers to define technical roadmaps, implement infrastructure changes, and drive platform modernization initiatives
- Mentored team of 5 data engineers across multiple time zones, conducting daily stand-ups and weekly planning sessions, reducing escalations through knowledge transfer and establishing standardized support processes
- Managed P0 incidents including critical ontology version errors affecting production workflows, coordinating with Palantir Support to drive rapid resolution and restore platform operations

Data Platform & Application Development

- Designed and delivered Data Directory based application replacing manual Excel-based process for 25-person team, scaling to **100K+ records** with automated data management, search capabilities, and real-time synchronization

- Developed KPI dashboard for tracking labor optimization, providing centralized performance metrics for executive stakeholders, enabling data-driven resource allocation and operational decision-making
- Built live streaming dashboard to track status of work order improving visibility into manufacturing workflows and accelerating issue resolution for operations teams
- Onboarded **20+ new data sources** into Palantir platform, establishing robust cross-platform connectivity from AWS and Databricks while ensuring zero-downtime migrations and data quality validation
- Developed and maintained **60+ end-to-end real-time data pipelines** using Spark, Python, and platform microservices, processing TBs of data daily with **99.9%+** uptime.

Data Engineer | FCA Stellantis (TCS), Michigan

2021 – 2023

- Designed high-performance data pipelines using AWS (S3, Redshift), Apache Hive, and Databricks, powering sales and service dashboards for **3,000+ users with real-time** geolocation-based insights on vehicle sales, services, parts, production, and recalls
- Developed complex SQL solutions with advanced aggregation and window functions, optimizing query performance for data modeling and business reporting requirements
- Built dynamic dashboards integrating key business metrics and KPIs using Foundry tools, resulting in **80% improvement** in decision-making efficiency through real-time survey data trend analysis
- Optimized dataset builds using data lineage analysis, enhancing downstream pipeline **performance by 30%** and ensuring timely, accurate data delivery platform-wide.

EDUCATION

Master of Science in Information Systems (Data Science)

2021

New Jersey Institute of Technology (NJIT), Newark, NJ

Bachelor of Technology in Electronics Engineering

2019

Veermata Jijabai Technological Institute (VJTI), Mumbai, India

CERTIFICATIONS

PCEP – Certified Entry-Level Python Programmer (2020)