

Venkata Sai Bharadwaj Velamakanni

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PROFESSIONAL SUMMARY

Data Engineer and Analyst skilled in building real-time pipelines and ETL workflows. Delivered \$3M+ revenue impact through dynamic pricing models and Tableau dashboards. Led cross-functional teams using SAFe agile practices to architect scalable solutions while collaborating with stakeholders including business teams, enterprise architects, and product team.

EXPERIENCE

Senior Data Engineer

Jan 2025 – Present

BulkMagic

Jersey City, NJ

- Built a real-time pricing engine using Spark, Kafka, and PostgreSQL to **adjust product pricing based on promotions, competitor data, and seasonality**.
- Integrated Valkey Redis **caching to reduce API calls by 40%** and Prefect orchestration to fetch competitor pricing weekly.
- Developed **fallback mechanisms** for pricing and data transformation logic using databricks and pyspark.
- Redesigning an Airflow & AWS Glue workflow to process 1TB/day of pricing data, with **potential to reduce runtime by 40% (5h to 3h) and cloud costs by \$18K/month**.
- Developed executive tableau dashboards using FP-Growth algorithms (NetworkX, Apriori) to **identify \$100K+ cross-sell opportunities** from market basket analysis.
- Mentored 3 engineers using Agile (SAFe) practices, conducting daily standups and sprint planning to align priorities with enterprise architects and business stakeholders.

Business Analyst II (Graduate Teaching Associate)

Aug 2024 – Jan 2025

CSU Fullerton

Fullerton, CA

- Graduate-level coursework on regression analysis, Monte Carlo simulations, and ARIMA forecasting was delivered, improving student test scores by 15%.
- Built 10+ interactive Excel models (Solver, Scenario Manager) simulating supply chain optimization and risk analysis, adopted by 90% of students for final projects.
- Led 2 workshops on advanced SQL techniques (CTEs, window functions), enabling 85% of students to pass LinkedIn SQL skill assessments within 4 weeks.

Data Analyst

Feb 2022 – Dec 2022

Vistex, Inc

Hyderabad, India

- Implemented rebate programs in SAP SD for 2 enterprise clients (e.g., \$50M pharma account), **reducing manual reconciliation efforts by 30%** and ensuring 100% compliance with contractual terms.
- Developed real-time compensation dashboards in SSRS (SQL, SAP HANA), **reducing payroll errors by 20% and saving HR teams 10+ hours/week** in reporting.
- Optimized eGTMS/GTMS cloud analytics pipelines, improving data accuracy by 35% and enabling **90% demo success rate for 3 clients, contributing to a 15% increase** in retention (\$4.2M preserved revenue)
- Collaborated with finance and sales teams to design rebate workflows in SAP SD, ensuring alignment with business goals and compliance standards.

Data Analyst

Jan 2021 – Sept 2021

Suven Consultants

Hyderabad, India

- Built a Python/SQL clustering model (K-means, RFM analysis) that increased ad CTR by **25% for a retail client, driving \$0.5M in incremental quarterly sales**.
- Designed 5 Tableau dashboards tracking real-time ad spend/ROAS for a \$0.7M marketing campaign, **reducing budget overages by 15% and improving CPA by 18%**.
- Partnered with marketing team to refine business logic and KPI dashboards, translating business requirements into actionable insights.

PROJECTS

End-to-End Machine Learning Pipeline for Fraud Detection

- Built a real-time pipeline ingesting data from Kafka, processing 1M+ daily transactions with PySpark on Databricks.
- Reduced deployment time by 70% by implementing Docker containerization and Kubernetes orchestration, enabling zero-downtime model updates via GitHub Action.
- Deployed TensorFlow models on GKE, autoscaling to handle 1M+ predictions/day, reducing cloud costs by 30%.

Vehicle Insurance Analytics Dashboard

[View Dashboard](#)

- Developed executive & granular dashboards for U.S. vehicle insurance claims, tracking KPIs: Total premiums, claim costs, loss ratio, and policy retention rate.
- Designed risk analysis modules using box plots to correlate vehicle specs (Power, Weight, Length) with claim amounts, identifying high-risk categories (e.g., SUVs with 25% higher claim severity).
- Integrated dynamic filters (Policy Type, Location, Risk Category) to allow executives to drill into regional trends.

SKILLS

Technical Skills: Python, SQL (Postgres), R, Flask, Apache Spark, Apache Kafka, FastAPI, Databricks, Airflow, AWS (S3, Glue, Lambda), Azure Data Factory, Snowflake, Docker, Kubernetes, Alteryx, Tableau, Power BI, Git, CI/CD
Software Engineering and Management: Data Modeling, SDLC (Agile, SCRUM), Jira, Slack, Clickup
Certifications: Microsoft Certified Azure Data Engineer Associate, Google Project Management Professional Certificate

EDUCATION

California State University, Fullerton
Masters in Information Systems, Concentration in Business Analytics

Fullerton, CA
Jan 2023 – Dec 2024