

Venkata Sai Bharadwaj (Ven) Velamakanni

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CORE COMPETENCIES

- **Programming & Tools:** Python (Pandas, NumPy, PySpark, Scikit-learn), SQL, Kafka, Airflow, Docker, Kubernetes, Git, Alteryx
- **Cloud & Big Data:** AWS (S3, Glue, Lambda, SageMaker, CloudWatch), Snowflake, Azure Data Factory, Databricks.
- **Data Engineering Expertise:** ETL Pipelines, Stream Processing, Delta Lake, Data Modeling, Partitioning, Parallel Processing.
- **Machine Learning & Analytics:** XGBoost, Clustering (k-means, DBSCAN), A/B Testing, Regression, Demand Forecasting (ARIMA, Prophet).
- **Visualization Tools:** Tableau, Plotly

RELEVANT WORK EXPERIENCE

Graduate TA Business Analytics II, Cal State Fullerton – Fullerton, CA, USA Aug 2024 – Jan 2025

- Taught advanced analytics concepts using Python and Tableau, focusing on regression and forecasting, leading to a 15% improvement in student test scores.
- Created an interactive data visualization flow diagram, increasing the effectiveness of the project presentation by 20%.
- Standardized coding best practices for student projects, resulting in a 30% increase in efficiency and collaboration.

Data Analyst, Vistex, Inc. – India Feb 2022 – Dec 2022

- Configured SAP SD modules to implement rebate programs for clients, customizing system settings to align with business requirements, and ensuring accurate transaction processing.
- Streamlined data preparation, analysis, and reporting using SQL and SAP architecture, developing compensation and benefits dashboards in UKG to enhance decision-making efficiency.
- Enhanced Standard Analytics for eGTMS and GTMS cloud systems, improving data accuracy and delivering client demonstrations with a 90% success rate, driving adoption of Vistex solutions.

Data Analyst, Suven Consultants – India Jan 2021 – Sept 2021

- Developed an audience segmentation model using Python and SQL to target personalized ads, leading to a 25% increase in ad click-through rates (CTR) across major campaigns.
- Built real-time dashboards in Tableau to monitor ad spend, impressions, and conversions, reducing budget overruns by 15%.
- Collaborated with cross-functional teams to optimize A/B testing frameworks, improving campaign performance by 20%.

HIGHLIGHTED PROJECTS

End-to-End Data Engineering and AI/ML Pipeline for Real-Time Fraud Detection Dec 2024 - Jan 2025

- Designed and implemented a scalable data pipeline using Apache Kafka and PySpark on Databricks to process both batch and streaming transaction data, integrating AWS S3 for raw data storage and DynamoDB for real-time indexing. Developed and deployed a Random Forest model on AWS SageMaker to detect fraudulent transactions with 94% precision, leveraging PySpark for feature engineering and automating workflows with Apache Airflow. Utilized Docker to containerize workflows and EC2 for scalable compute resources, enabling end-to-end orchestration and visualization with Tableau.

NYC Taxi Data Pipeline Jul 2024 - Aug 2024

- Built a robust ETL pipeline using Azure Data Factory, Databricks, and Delta Lake, reducing data processing time by 30% through parallelization. Transformed raw data into Parquet format for efficient storage in Azure Data Lake Gen2, cutting query latency by 20%. Developed Power BI dashboards to uncover operational insights, driving data-driven decisions for cost savings and efficiency.

Real-Time Healthcare Data Pipeline and Analytics Sept 2024 - Nov 2024

- Designed a real-time data pipeline with Azure and Snowflake to process 10K electronic health records (EHRs) per hour, ensuring HIPAA compliance with advanced encryption and masking. Created dynamic Power BI dashboards to visualize healthcare trends, reducing clinical decision-making time by 30%. Automated data ingestion and processing workflows, enabling near real-time insights for healthcare providers.

EDUCATION

California State University, Fullerton, M.S. in Information Systems, Business Analytics Dec 2024

- **Coursework:** Statistical Analysis, Financial Analytics, Data Modeling, Business Database Design and Processing, Principles of Business Intelligence, Decision Models for Business and Economics, and Information Resource and IT Project Management.

Vardhaman College of Engineering, B.Tech. in Mechanical Engineering | Supply Chain May 2022