

# VINAY MANDALA

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## PROFILE

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Data analyst with around 2 years of experience in statistical analysis, machine learning, and data visualization. Excellence in Python, R, SQL, and tools like Tableau, and Power BI. Expertise in predictive modeling, feature engineering, and data cleaning. Good record in optimizing business processes through actionable insights and collaborative problem-solving. A detail-oriented professional committed to delivering high-quality results.

## SKILLS

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**Languages:** Python, SQL, R, NoSQL, MATLAB, JavaScript

**Database:** MS-SQL, MySQL, Redshift, Snowflake, Big Query, PostgreSQL, MongoDB, Spark SQL

**Frameworks & Tools:** NumPy, Pandas, Matplotlib, Flask, Django, Git, GitHub, Docker, CI/CD, Statistics, HTML, CSS, Agile, SAS, Hive, Pyspark, ggplot2, Snowflake, Seaborn, Jira, Ad hoc, KPI Analysis,

**Data Analysis & ETL Tools:** Power BI, Tableau, Sterling Integrator, Data Bricks, MS Excel, Google Analytics, Machine Learning, Data Modeling, Data Mapping, Data Mining, Data Extraction, Transformation

## EXPERIENCE

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### Data Analyst, Southwest Airlines

08/2023 – Present | Remote, USA

- Conducted in-depth data analysis on key metrics in the aviation industry, including flight schedules, passenger traffic, aircraft maintenance records, fuel consumption, and safety incidents, utilizing Python.
- Integrated weather information, airspace restrictions, and airport congestion data with internal aviation data using Apache Spark and Apache Kafka to augment situational awareness.
- Employed the AWS Lambda serverless computing platform to develop event-driven microservices for real-time data processing, integrating third-party APIs within the aviation sector.
- Utilized machine learning algorithms, specifically Random Forest Regression and Gradient Boosting models, on historical aviation data to predict flight demand and optimize pricing structures. Developed and managed MySQL databases to facilitate the storage, organization, and retrieval of critical aviation data, including flight schedules, passenger information.

### Data Engineer, Mindtree LTD

07/2021 – 07/2022 | Chennai, India

- Developed custom applications using open-source tools and frameworks to address specific business requirements, ensuring efficient data processing and analysis.
- Designed robust data architectures using Apache Kafka and Apache Spark for seamless data ingestion and processing and established efficient pipelines for data storage in SQL databases and data warehouses.
- Created APIs with Flask and FastAPI for user query processing and data manipulation from SQL databases, incorporating secure authentication and authorization protocols for safeguarding sensitive information.
- Utilized cloud platforms AWS to deploy and manage scalable, cost-effective data processing pipelines, collaborating with teams to understand requirements, translate them into technical solutions, and perform data analysis and visualization using Tableau, Matplotlib, and Seaborn to generate insights and support decision-making.
- Utilized Git and GitHub for version control, and Agile methodologies with Jira and Trello for project management, ensuring code quality, timely delivery, and effective stakeholder communication.

### Graduate Engineering Trainee, L&T Nxt.

06/2021 – 07/2021 | Chennai, India

- Collected and inspected large, complex data sets from various sources, ensuring data quality and integrity. Utilized tools such as pandas and NumPy for data manipulation and Matplotlib and Seaborn for data visualization.
- Developed RESTful APIs using Flask and Scikit-learn for data cleaning, processing, and machine learning capabilities into our product, enabling seamless integration of ML models for efficient data processing and analysis.
- Developed Flask applications to deploy ML models, offering a user-friendly interface for model and result visualization, using Scikit-learn and TensorFlow for development and Docker for containerization and deployment.

## EDUCATION

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### Master of Science, Data Science

The University of Texas | Arlington, TX

08/2022 – 05/2024

### Bachelor of Technology, Computer Science & Engineering

University College of Engineering, JNTUK | Kakinada, India

08/2017 – 05/2021