Lakshmi Amrutha Duvvuri

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EDUCATION

- **VIT Bhopal University** (June, 2022 - Present)
  Bachelor of Technology | CGPA: 8.68
- **Delhi Public School , Ruby Park , Kolkata** (April, 2022)
  Higher Secondary | Percentage: 92.4%
- **Delhi Public School , Ruby Park , Kolkata** (April, 2020)
  Secondary | Percentage: 91.4%

SKILLS

Data Science & Analytics: Python, SQL, Machine Learning, Statistical Analysis, A/B Testing, Predictive Modeling
Visualization & BI: Tableau, Matplotlib, Seaborn, Plotly

PROJECTS

PredictCare: Fetal Health Risk Classifier | Streamlit
Tech: Python, Pandas, scikit-learn, FastAPI, Streamlit, pickle (June, 2025)
- Built a machine learning system to classify fetal health (Normal, Suspect, Pathologic) from CTG data, achieving 94.84% accuracy with Gradient Boosting to support early detection of fetal distress.
- Deployed an interactive Streamlit app with a FastAPI backend, allowing clinicians to visualize fetal health classifications and process 50+ CTG inputs with near-perfect accuracy.

DataMartify | GitHub
Tech: Python, pandas, numpy, SQLAlchemy, PyMySQL, MySQL, MySQL Workbench, Jupyter (June, 2025)
- Built an end-to-end ETL pipeline to process 55,000+ retail orders from Kaggle, transforming raw data with Python to clean inconsistencies, convert data types, and engineer features for sales analytics.
- Loaded transformed data into MySQL using SQLAlchemy and PyMySQL, creating structured tables and executing 20+ integrity checks to ensure data quality.
- Leveraged MySQL Workbench to run advanced SQL queries, uncovering insights such as 28% month-over-month sales growth, top 10 products driving 40% of revenue, and category-wise profit trends to support strategic decisions.

Customer Segmentation & Revenue Strategy using RFM Analysis | GitHub
Tech: Python, Pandas, scikit-learn, Seaborn, Matplotlib (December, 2024)
- Performed end-to-end RFM-based segmentation using K-Means on transaction data, identifying 4 customer clusters and uncovering 15% churn risk in low-frequency buyers, leading to targeted retention strategies
- Identified that Cluster 2 (8% users) contributed 35%+ of revenue, prompting targeted initiatives to boost retention and reduce churn.
- Mapped customer behavior insights using Seaborn pairplot, doughnut charts and heatmaps, informing a complete overhaul of the customer journey.

CERTIFICATIONS

- **Data Analysis with Python** (IBM, Coursera) - Mastered data cleaning, exploratory data analysis (EDA), and visualization using Pandas, NumPy, and Matplotlib
- **Applied Machine Learning in Python** (University of Michigan, Coursera) - Gained proficiency in supervised and unsupervised learning, model evaluation techniques, cross-validation, and scikit-learn pipelines

ACHIEVEMENTS

- Ranked among top 3% globally in TCS CodeVita 2024 by qualifying Round 1 with a rank of 4112 among 150,000+ participants
- Achieved 201st position among 3000+ participants in the Implementation Round of Myntra HackerRamp 2024, post successful completion of the Ideation Phase.
- Awarded the Scholar Badge for Academic Excellence among 1200+ students in both Class 10 and 12

POSITIONS OF RESPONSIBILITY

Event Management Lead, Android Club (October, 2023 - Present)
- Led a 70+ member team to plan and execute 10+ technical and community events, overseeing timelines, and coordination.

Technical Team Lead, English Literary Association (December, 2023 - Present)
- Guided a technical team of 5+ developers in developing the club's website, then independently organized a faculty-led event, handling logistics, promotions, and coordination, resulting in a footfall of 50+ students.