ARIKATLA CHARAN TEJA

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EDUCATION

IIT KHARAGPUR   Kharagpur, WB
Bachelor of Technology   Expected May 2027
Major in Electronics and Electrical Engineering
Relevant Coursework: Algorithms, Linear Algebra , Optimization, Probability , Statistics, Signal Processing

TECHNICAL SKILLS

- **Programming & Databases:** Python (Advanced), SQL (PostgreSQL, SQLite), JavaScript, HTML/CSS,C,C++
- **Data Science & ML:** Pandas, NumPy, Scikit-Learn, spaCy, XGBoost, TensorFlow (beginner), PyTorch (beginner)
- **Data Engineering:** ETL Pipelines, PySpark (learning), Airflow (learning), API Integration, Selenium Web Scraping
- **Visualization & Analytics:** Matplotlib, Seaborn, Streamlit, Tableau/PowerBI (learning)
- **Cloud & Infra:** Docker (beginner), GCP/AWS (basics), Git, Bash, Cron Jobs, REST APIs
- **Languages:** Fluent in English, Telugu; Conversational Proficiency in Hindi
- **Certifications:** Data Analytics & Visualization (University of Penn), Data Structures & Algorithms (GFG/AlgoZenith), Exploratory Data Analysis (IBM, GFG)

PROJECTS

JOB MATCH RESUME PARSER
- Built an NLP pipeline to parse resumes and job descriptions, extracting skills and computing similarity scores.
- Implemented TF-IDF vectorization + cosine similarity with Pandas & spaCy.
- Deployed an interactive Streamlit app where users can upload PDFs and view match scores + highlighted skills.
- *Tech:* Python, Pandas, spaCy, Streamlit, Scikit-Learn

MOCK MARKET ANALYSIS TOOL (ETL+Analytics)
- Built Processed **20K+ messy e-commerce rows** with outliers, NaNs, and nested categories into a clean, normalized dataset.
- Designed a modular ETL pipeline with Pandas & SQLite; automated ingestion with Cron Jobs.
- Produced segment-wise analytics with Jupyter visualizations (pricing, demand, category trends).
- *Upgrading with PySpark* to handle larger datasets and Tableau dashboard for visual reporting.
- *Tech:* Python, Pandas, SQLite, Jupyter, CRON, (PySpark planned

CUSTOMER CHURN PREDICTION (ML Project) *(AUG 2025)*
- Built a classification model to predict telecom customer churn using Scikit-Learn.
- Compared Logistic Regression, Random Forest, and XGBoost with hyperparameter tuning.
- Achieved **~87% accuracy** with XGBoost and explained key drivers of churn via feature importance plots.
- *Tech:* Python, Pandas, Scikit-Learn, XGBoost, Matplotlib

CREDIT CARD FRAUD DETECTION
- Analyzed a **highly imbalanced Kaggle dataset (284,807 transactions; 492 fraud cases)**.
- Preprocessed data with scaling, oversampling (SMOTE), and class balancing techniques.
- Trained and compared models (Logistic Regression, Random Forest, XGBoost).
- Achieved **94% precision** and **90% recall** for the fraud class using XGBoost with tuned hyperparameters.
- Built a reproducible pipeline with scikit-learn for preprocessing, training, and evaluation.
- *Tech:* Python, Pandas, Scikit-Learn, XGBoost, Matplotlib, Seaborn

LEADERSHIP AND COMMUNICATION EXPERIENCE

GOVERNOR - TDS (IIT KHARAGPUR)   Kharagpur,WB
Head of the club   Mar 2024 – Sept 2024
- Managed a 130+ member student team across creative, logistics, and finance departments
- Oversaw budgeting, stage management, and event planning for 3 college-wide events (2,000+ attendees each)
- Fostered cross-functional collaboration between administration, student bodies, and technical staff

STARTUPS & INITIATIVES

1. **SkillBeam(Founder) :** Early-stage micro-SaaS startup aimed at democratizing career guidance for Tier 2/3 students.
2. **Overflow Theory(Researcher) :** Ongoing theoretical work connecting physics and information science with potential applications in algorithmic entropy compression.