Arya Lokesh Gowda

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EXPERIENCE

Data Analyst | Nelnet | Nebraska, USA

Aug 2024 – Present

- Developed financial models and analyzed KPIs, improving forecast accuracy by 5%
- Automated 10+ financial reports using SQL-based ETL workflows on Snowflake, decreasing work hours by 88%
- Streamlined ledger management by integrating financial reports across systems and migrating customer invoicing to a unified platform, reducing processing time by 70%

Data Processor | *Northeastern University* | Boston, USA

Oct 2023 – Present

- Optimized queries to extract and analyze applicant data for efficient processing to present findings in reports, enhancing transparency, communication, and drive admission decisions
- Extracted key metrics to drive insights, refining selection criteria and planning with agile methodologies

Data Engineer | Infosys | Bangalore, India

Oct 2021 – Aug 2023

- Architected a scalable data warehouse handling 10M+ daily records, with data governance protocols that reduced data quality issues by 40%, resulting in a \$150K (3%) reduction in operational costs
- Orchestrated end-to-end ETL pipelines processing 500GB+ daily data across 12 source systems, reducing processing time from 6 hours to 45 minutes
- Led development of ML models for customer segmentation and predictive analytics, generating \$122K additional revenue

 Data Science Intern | Entuple Solutions | Bangalore, India

 Jun 2020 Jan 2021
- Deployed machine learning models for product optimization, resulting in 15% performance improvement and \$50K annual cost savings across manufacturing operations
- Visualized real time metrics for 10+ stakeholders and initiated automation processes for multiple instances

SKILLS

Programming Languages: Python, SQL, Java, R, MATLAB

Data: PostgreSQL, NoSQL, DBeaver, MySQL, Oracle SQL, MongoDB, Hadoop, MS Excel (VLOOKUP, Pivot Tables, Macros), SAS, Apache Spark, Hadoop, Hive, Jupyter

Business Intelligence: Tableau, Power BI, MS Access, Salesforce, Netezza

Cloud: Amazon Web Services (EC2, Redshift, Lambda, Glue, Athena, Sagemaker, IAM), Google Cloud Platform, Docker *Engineering*: Airflow, JIRA, ControlM, GitHub, GitLab, Talend, Jenkins, Kafka, Snowflake

PROJECTS

Graid - Chatbot to aid your grades

Jan 2025-Present

- Pioneered an interactive AI-powered chatbot leveraging GenAI, Speech-to-Text LLMs (Groq), Pinecone, FastAPI, and RAG models to enhance student learning from video lectures
- Innovated a novel RAG framework for efficient contextual retrieval and personalized learning experience

Covid-19 Vaccine Sentiment Analysis | *VADER*, *Time Series Analysis*

Aug 2024-Nov 2024

- Engineered scalable pipeline processing 100K+ tweets daily, implementing custom NLP preprocessing
- Developed dashboards correlating sentiment trends with 50+ major vaccine events, identifying 3 key message types that increased vaccine acceptance by 12% in target demographics

Instagram Reach Analysis | *Passive Aggressive Regressor*, *Seaborn*, *Statsmodels*

Jun 2024-Aug 2024

- Built ensemble ML model analyzing 20+ engagement metrics across 10,000 posts, achieving 92.8% accuracy and identifying optimal posting windows that increased reach by 35%
- Used A/B testing for content strategy, increasing engagement rate to 14% and 25% in follower acquisition

Fetal Health Classification System | *PySpark*, *scikit-learn*, *MLflow*, *Autoencoders*

Jan 2024-Apr 2024

- Designed a distributed ML pipeline processing 5000+ medical records daily, achieving 97% sensitivity in critical case detection, potentially impacting 1000+ patient outcomes annually
- Engineered custom Autoencoder architecture for anomaly detection, reducing false positives by 40% and achieving 99% precision in high-risk pregnancy identification

Customer Data Stratification | NumPy, Matplotlib, TensorFlow

Sep 2023-Dec 2023

- Led 5-person team in developing RFM segmentation model analyzing 50,000+ customer profiles, **generating \$70,000** additional revenue through campaigns targeting 4 distinct customer segments
- Refined and deployed BERT-based NLP model processing 100,000+ customer interactions, achieving 96% accuracy in behavior prediction and **driving 13% sales increase**

EDUCATION

M.S in Data Analytics Engineering | Northeastern University | Boston, MA | GPA: 3.8/4

May 2025

Focusing: GenAI, MLops, Data Mining, Data Warehousing and Data Management in Analytics

B.E in Electronics and Communication | Visvesvaraya Technological University | India

Jul 2021