Dhanush Chandra Shekar

Education

Indiana University Bloomington

Aug 2024 – May 2026

M.S. in Data Science; GPA: 3.71/4.00

Relevant Coursework: Machine Learning, Natural Language Processing, DBMS, Applied Statistics

Bangalore Institute of Technology

Aug 2020 – May 2024

B.E. in Computer Science and Engineering; CGPA: 8.51/10

Technical Skills

- Languages: Python, SQL, Java, C++
- ML/NLP: LLMs (Groq, Hugging Face), Deep Learning, BERT, Transformers, Text Classification, Clustering
- Data Engineering: ETL, API Wrangling, Snowflake, SQL Optimization
- Visualization: Tableau, Power BI, Seaborn, Matplotlib, Streamlit
- Frameworks: TensorFlow, PyTorch, Scikit-Learn, Keras, LangChain, FAISS, Flask
- Databases: PostgreSQL, MySQL, Neo4j
- Other Tools: Git, VSCode, AWS, Jupyter

Projects

ChurnMaster: ML-Powered Retention System 🗘

May 2025 - June 2025

Python, Flask, XGBoost, CatBoost, Scikit-Learn

- Designed and deployed a churn prediction app with Flask UI supporting real-time inference.
- Achieved 94% F1-score using an ensemble ML pipeline (XGBoost, CatBoost, Random Forest).
- Automated preprocessing, feature selection, and model tuning for reproducibility and efficiency.
- Integrated Bootstrap 5 frontend with user validation, logging, and error-handling.

AI-Powered Finance Q&A App 🞧

Dec 2024 - Jan 2025

Python, Streamlit, LangChain, FAISS

- Built a real-time RAG-based Q&A system for financial articles with Streamlit interface.
- Enhanced response accuracy by 93% using FAISS indexing and Hugging Face embeddings.
- Reduced inference latency by 40% with Groq LLM integration and LangChain optimization.
- Implemented fault-tolerant scraping achieving 96% article retrieval success rate.

Pneumonia Detection with VGG16 (7)

Oct 2022 - Dec 2022

Python, Keras, OpenCV, Streamlit

- Created an X-ray classification model using VGG16 with 95% test accuracy.
- Processed 5,800+ medical images with augmentation to improve robustness.
- Launched a Streamlit dashboard with Grad-CAM visualizations for clinical insight.

Netflix Viewer Engagement Analytics (7)

Jun 2024 – Jul 2024

Python, Tableau, Seaborn, Scikit-Learn

- Analyzed 1.5M+ user logs to reveal viewing patterns and inform content release strategies.
- Boosted recommendation system precision by 20% via feature optimization using RFE.
- Cut prediction error by 15% through time-series modeling and cross-validation.

Experience

Data Science Intern, EBTS 🖓

Oct 2023 - Nov 2023

Issued: April 2024

Bangalore, India

- Automated attendance tracking for 1,000+ users with a real-time face recognition system (95% accuracy).
- Reduced manual effort by 70% using Flask-based web interface and OpenCV-KNN model.
- Led a 3-member team and delivered full deployment across academic departments under strict timeline.
- Designed a mobile-friendly UI and CSV-based attendance logging pipeline.

Certifications

AWS Certified AI Practitioner