SATVIK GAJANAN NAYAK

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Software Engineer with a strong data engineering foundation, experienced in building reliable, scalable data and ML pipelines that support high-quality, user-focused software delivery.

EDUCATION

The University of North Carolina at Charlotte, Charlotte, NC, USA **Aug 2024 - May 2026**
Master of Science in Computer Science, Concentration: Data Science **GPA: 3.77**
Courses: Algorithms and Data Structures, Artificial Intelligence, Database Systems, Visual Analytics, Software System Design Implementation, Data Information Visualization, Computer Communication and Networks.
+ **Teaching Assistant** for Algorithms & Data Structures and Software Engineering

Mukesh Patel School of Technology Management & Engineering, NMIMS University, India **Aug 2020 - May 2024**
Bachelor of Technology in Computer Engineering **GPA:3.39**
Courses: Data Structures, Design and Analysis of Algorithms, Machine Learning, Deep Learning, Artificial Intelligence, Software Engineering, Business Information Visualization and Analysis, Big Data Analytics, Cloud Computing, Database Management System, Programming for Problem Solving, Natural Language Programming.

TECHNICAL SKILLS

- Programming Languages: Python, R, SQL (MySQL), C, SAS
- Software: Tableau, Power BI, Dataiku DSS, SAS Visual Analytics, AWS, Spark, Hadoop, Excel, VS Code, Git, GitHub
- Web Technologies: HTML, CSS
- Other Skills: Storytelling with Data, Decision-Making, Analytical Thinking
- Libraries: NumPy, Pandas, Scikit-Learn, TensorFlow, PyTorch, Matplotlib, Seaborn, Streamlit, FastAPI, D3.js, GeoPandas, LangChain, FAISS

EXPERIENCE

Hackveda Limited **Dec 2023 – Apr 2024**
Data Engineer Intern

- Designed and implemented production-oriented, cloud-based data and machine learning pipelines using Python, SQL, and Dataiku DSS to support operational decision-making at scale.
- Built data processing workflows over 500K+ anonymized banking transactions, performing feature engineering and validation to improve reliability of downstream fraud detection models.
- Developed and evaluated predictive models on real-world datasets, balancing accuracy, interpretability, and stability to support business-facing decisions, not just offline metrics.
- Implemented data quality checks, logging, and validation steps for repeatable and maintainable analytics workflows.
- Collaborated with cross-functional stakeholders to translate analytical outputs into actionable insights, contributing to measurable reductions in fraud-related false positives.

ACADEMIC PROJECTS

Local LLM PDF Chatbot with Retrieval-Augmented Generation **Aug 2025 – Oct 2025**

- Built a Python-based AI service using FAISS and LangChain to enable grounded LLM responses over private documents through embedding-based retrieval.
- Designed modular ingestion, chunking, and retrieval components to simulate a production-style AI system with dynamic data updates and consistent response behavior.

Predicting Admission to Foreign Universities **Jan 2023 – May 2023**

- Improved data reliability through statistical validation and outlier handling, increasing usable signal for downstream modeling by 27%.
- Compared ML approaches, selecting models for generalization and robustness over peak accuracy.

Bank Loan Status Analysis Using Data Mining Techniques **Dec 2023 – May 2024**

- Processed datasets containing 1M+ values, resolving data quality issues and engineering features for credit risk prediction.
- Evaluated classification models to understand tradeoffs between approval rates and default risk, framing results around decision impact.

Dashboard Designing using SAS Visual Analytics **Jan 2023 – May 2023**

- Developed multi-page interactive dashboards to surface key metrics, improving insight discovery by 15%.
- Enabled stakeholder drill-down from aggregate views to detailed signals to support data-driven decisions.