

# Shashank Mankala

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in shashankmankala   🔗 shashank-mankala1.github.io/portfolio

## Education

### State University of New York at Buffalo

*Master's in Data Science (GPA: 3.9/4.0)*

*Aug 2024 – Present*

*Buffalo, United States*

### Lovely Professional University

*Bachelor's in Computer Science and Engineering (GPA: 3.6/4.0)*

*Aug 2019 – May 2023*

*Punjab, India*

## Experience

### Data Scientist

*New Era Cap*

*Aug 2025 – Present*

*Buffalo, United States*

- Building an end-to-end demand-forecasting pipeline in Snowflake and deploying models with Azure, reducing manual planning time by 60% and improving forecast accuracy by 25%
- Automating vendor capacity & purchase buy planning by implementing allocation logic and retraining pipelines, eliminating 100% of manual Excel consolidation and ensuring scalable, auditable forecasts across 40k+ SKUs.
- Collaborating with supply-chain, sourcing, and engineering to design data schema, implement ETL, validate models, and produce stakeholder documentation

### Lead Data Analyst

*Shadowfax*

*Dec 2023 – Jul 2024*

*Bangalore, India*

- Achieved 98% accuracy in cleaning employee database, a company-first in its 9-year history
- Optimized manpower allocation and delivery routes across East India using analysis and visualization Looker dashboards, improving supply chain efficiency by 60%.
- Drove 60% efficiency gains by delivering actionable insights from in-depth hub performance analysis

### Software Engineer Intern

*Frugal Testing*

*Jun 2022 – Jun 2023*

*Hyderabad, India*

- Created and implemented automation frameworks for 4 diverse projects, reducing manual testing and increasing efficiency by 30%
- Played a key role in developing the Central Bank Digital Currency (CBDC) product in collaboration with NPCI, performing and publishing it globally
- Pioneered test methodology improvements through rigorous data analysis, informing cross-functional teams and cutting down testing cycle times by approximately 20% across four projects

## Projects

### TutorMind - GenAI-powered Personalized Tutor

[LINK](#) 

- Developed a full-stack RAG-based GenAI application using LangChain, FAISS, and OpenAI to enable question answering from user-uploaded curriculum materials (PDFs, notes, videos)
- Integrated feedback-driven dual-model(factual + conceptual), and document-specific embedding logic, ensuring high answer accuracy with zero hallucination

### Real-Time Crypto Trading Dashboard with ML & Streamlit

[LINK](#) 

- Built a real-time crypto trading pipeline on GCP using Dockerized microservices, Redpanda, and Streamlit for automated and scalable execution
- Developed 6 modular services for data backfill, live trade streaming (1K trades/sec), LightGBM-based price prediction (78% F1), and a dashboard tracking ROI and strategy performance

## Skills

**Languages:** Python, SQL, R, C++, MATLAB, Javascript, HTML/CSS

**Machine Learning and AI Technologies:** Machine Learning, AI, NLP, LLM, PyTorch, TensorFlow, LangChain

**Data Tools:** Docker, DagsHub, Apache Spark, Git, Jupyter Notebook

**Cloud Platforms:** AWS, Google Cloud (GCP), Snowflake, Databricks

**Data Visualization:** Tableau, Power BI, Looker Studio

**Database Systems:** MySQL, PostgreSQL, Neo4j, MongoDB

**Experimental Design:** A/B testing, hypothesis testing, statistical inference