NAVISHA SHETTY

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EDUCATION

NORTHEASTERN UNIVERSITY, BOSTON, MA Dec 2025
Master of Science in Data Analytics Engineering
Relevant Coursework: Probability and Statistics; MLOps; Data Mining; Computation and Visualization; Prompt Engineering and AI

MANIPAL UNIVERSITY JAIPUR, INDIA May 2020
Bachelor of Technology in Information Technology
Relevant Coursework: Data Structures; Data Science; Data Mining and Warehousing; Advanced Machine Learning

SKILLS AND CERTIFICATIONS

PROGRAMMING LANGUAGES AND FRAMEWORKS: Python; PySpark; SQL; C; TensorFlow; PyTorch; PostgreSQL; Spark; OOP concepts;
DEVOPS & MLOPS: Cloud; AWS EC2; S3; Docker; Kubernetes; Terraform; Ansible; Apache Airflow; Snowflake; MLflow; Git; CI/CD;
AI/ML: Coding Agents; ReAct; SmolAgents; Machine Learning; LangChain; LLMs; Natural Language Processing; Deep Learning;
CERTIFICATION: Snowflake Snowpro Core Certification [Certificate Link]

EXPERIENCE

LG ENERGY SOLUTION VERTECH, Westborough, MA Jan 2025 - Aug 2025
Software Engineer Intern

- Designed a **coding agent** using the **ReAct** framework to handle real time Day-Ahead Market (DAM) energy data queries, integrating **Phoenix tracing** for monitoring, custom **toolchains**, and a **chat UI** for dynamic customer interaction.
- Built scalable Snowflake data pipeline using **Snowpark API** in Python to ingest and transform analytics data from APIs and aggregating and filtering Snowflake tables. **Automated** pipeline execution using **AWS Lambda** with scheduled triggers
- Enhanced backend and frontend performance of a FASTAPI + Streamlit-based **Energy Market Optimization tool**, integrating live energy market feeds, managing site-specific configurations via **AWS S3**, and implementing **JWT-based token auth** via cookies

TEKSYSTEMS GLOBAL SERVICES, Bangalore, India Oct 2021 - Aug 2023
Software Engineer

- Deployed **GPU**-enabled **EC2 instances** (P3) in Kubernetes cluster with NVIDIA device plugin and cluster autoscaler
- Designed and managed **Apache Airflow DAG**s to automate and enhance data workflow efficiency for streamlined operations
- Developed **PySpark** scripts for the efficient transition of ML projects to the Spark platform, improving scalability and performance, resulting in a 25% improvement in data processing speeds and a 15% reduction in resource utilization
- Identified and resolved **Docker containerization** issues, optimizing build times by 45 minutes, and enhancing overall efficiency
- Deployed MLFlow on **Kubernetes pods** as a managed service to track over 50 ML models and created AWS **Application Load Balancers** using **Terraform** to maintain high performance and availability of service

PITNEY BOWES, Pune, India Jan 2020 - Oct 2021
Associate Data Science Engineer

- Implemented **NLP solutions** like Word2Vec, GloVe to automate the tax and shipping calculations for the HS10 Classification project by associating commodity names with their respective HS10 codes, thus eliminating the need for manual intervention.
- Trained ANN and RNN models using **Pytorch**, enhancing parcel weight estimation model accuracy by 25%
- Deployed the Estimated Delivery Date model implementing **CatBoost algorithm**, elevating the performance to 98% F1 score

PROJECTS

BESS Coding Agent - Built an **LLM**-based coding agent using the **SmolAgents** framework for trader queries and observability related to Day-Ahead energy Market for Battery Energy Storage Systems (BESS), exposing a chat UI and Phoenix dashboard. [Project Link]

Scaling With Kubernetes - Deployed Kubernetes deployment and management on **GPU nodes**, showcasing **DevOps** expertise through automated cluster provisioning, advanced networking, monitoring, and application deployment. [Project Link]

News Articles Summarizer using LLMs - Developed a News Articles Summarizer using **LangChain** and LLM endpoints (OpenAI - GPT-4 and Huggingface - T5), streamlining content extraction and summarization. [Project Link]

Ad survey using LLM - Built a **multi-modal** video understanding AI system using the **LLaVa model** to predict survey responses from video ads. Fine-tuned prompts and evaluated model performance. [Project Link]

PUBLICATION

Machine Learning for Prognosis of Life Expectancy and Diseases, IJITEE Journal | [Paper Link]