SAMIDHA BHOSALE

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SKILLS

Programming & Languages: Python, SQL, R, Java, HTML, CSS, JavaScript, React
Machine Learning & Data Science: Scikit-learn, Keras, Tensorflow, Pandas, NumPy, StatsModels, Supervised & Unsupervised Learning, Deep Learning, Natural Language Processing (NLP), LLM, Prompt Engineering, Feature Engineering, Model Evaluation, Hadoop, Spark, Statistics, Pytorch, Data Structures and Algorithms
Data Analysis & Visualization: Plotly, Seaborn, Streamlit, Matplotlib, Data Wrangling, EDA, Real-Time Analytics
Tools & Technologies: REST APIs, Docker, Kubernetes, Github Actions, Jupyter, Visual Studio Code, Linux, Agile Methodologies
Databases & Cloud Platforms: PostgreSQL, MySQL, SQLite, Microsoft Azure, Google Cloud Platform

PROJECTS

SpaceX Falcon 9 Launch Analysis - *Github Link* **Jan 2024 – May 2024**

- Collected and processed launch data using the **SpaceX REST API** and web scraping; transformed datasets with **Pandas** and **SQL**.
- Built predictive models using supervised ML algorithms; evaluated model performance across distributed datasets for scalability.
- Created interactive dashboards using **Plotly Dash** for real-time stakeholder insights.
- Visualized launch sites geospatially using **Folium**, enabling filtered analysis by location and mission success.
- Completed as part of the IBM Data Science Professional Certificate capstone project.

Natural Language to SQL - *Github Link* **June 2024 - Dec 2024**

- Designed and implemented NLP pipelines using **OpenAI GPT-3.5 API**, **prompt engineering**, and **RESTful query handling** to support text-to-SQL conversion for real-world applications.
- Integrated secure upload and querying of both preloaded and custom **SQLite** datasets using **Streamlit** and **Pandas** for flexible analysis.
- Visualized SQL query results using **Plotly** in a responsive dashboard, enabling real-time analytics.
- Built modular ML tooling and pipelines from scratch using Jupyter, deployed using GitHub Actions and CI/CD workflows for updates.
- Collaborated with users to iteratively refine prompt accuracy and improve UI/UX responsiveness.

Neural Style Transfer Web App - *Github Link* **Jan 2025 - May 2025**

- Developed a **PyTorch**-based deep learning pipeline leveraging **VGG-19** for real-time neural style transfer on user-uploaded images.
- Built an interactive **Streamlit** web app with upload, stylization feedback, and image download functionality using **Matplotlib**.
- Deployed the application through **Git-based CI/CD workflows** with **GitHub Actions**, ensuring fast updates and continuous delivery.
- Developed and tested locally using **Visual Studio Code**, optimizing latency for responsive user interaction.

EDUCATION

University at Buffalo - SUNY **Jan 2024 - May 2025**
Master's, Data Science *GPA: 3.3*

University of Mumbai **July 2017 - June 2021**
Bachelor's, Electronics and telecommunication Engineering *GPA: 7.39*

PROFESSIONAL EXPERIENCE

Embedded Technosolutions **Mumbai, India**
Embedded Systems & AI Intern *Dec 2018 - Jan 2019*

- Developed IoT solutions with Raspberry Pi and Python for real-time data collection and on-device ML inference.

Bhabha Atomic Research Centre **Mumbai, India**
Research Intern *Dec 2019 - Jan 2020*

- Studied the architecture and operational protocols of electronic systems powering the Dhruva Research Reactor, focusing on control circuits, safety interlocks, and instrumentation diagnostics.
- Gained exposure to instrumentation, embedded control systems, and safety protocols used in high-reliability nuclear infrastructure.

CERTIFICATIONS

- IBM Data Science Professional Certificate
- Publication: Prime Numbers and Their Digital Roots (Mathematics). IRJET, Volume: 09, Issue: 09