SATYA SAURABH MISHRA

Gangeshwar Nath Chunar, 231304, Mirzapur U.P

Education

PDPM, IIIT Jabalpur

Jabalpur, MP

M. Tech - Computer Science and Engineering—Current CGPA: 8.8

Aug. 2022 - Present

UNSIET, VBSPU Jaunpur

Jaunpur, UP

B. Tech - Computer Science and Engineering—CGPA: 8.2

July 2018 - June 2022

Experience

Data Science Intern July 2023 - Present

Dell Technologies

Onsite

Remote

- Enhanced LLM model's query response using RAG methodology with Dell data.
- Conducted end-to-end experiments on **llama-index** and **langchain**, integrating **OpenAI** and **custom LLM models**.
- Led efforts to fine-tune embedding models, improving their ability for enhanced dell data representation.
- Explored Vector Database like Chroma DB and Faiss for efficient storage and retrieval of vector representations.
- Implemented prompt techniques like Cot(Chain of Thought) for optimizing and getting better results from LLM.
- optimized model performance through different evaluations strategy and comparisons with other llm models. • Utilized MLflow for experiments tracking and Model registry.

Teaching Assistant

July 2022 - Sept. 2022

Coding Ninja

- Assisted 50+ students in learning C++ and Data Structures.
- Took doubt sessions and resolved more than 90+ doubt with average rating of 4.58/5.
- **Debugged codes** and helped students with their assignments and problems.

Projects

E2E NLP Text Summarization With Deployment O | LLM, NLP, Docker, EC2, CI/CD

Sep. 2023 - Oct. 2023

• Architected and deployed an E2E Text Summarization ML app with google pegasus model on AWS EC2, orchestrated CI/CD using github actions, and containerized with Docker for scalable deployment.

E2E ML Wine Quality Prediction With Deployment $\Omega \mid ML, Docker, EC2, CI/CD$

July 2023 - Aug. 2023

• Implemented E2E wine qulaity prediction. Achieved seamless deployment on AWS EC2 instances through an integrated GitHub Actions CI/CD pipeline, containerized the code with Docker, and integrated MLflow for experiment tracking and model registry.

Amazon Reviewer Network Analysis \mathbf{Q} | Python, NetworkX, Matplotlib, Pandas, Numpy

Oct. 2022 - Dec. 2022

• Analyzed and identified-cohesive reviewer communities within Amazon product reviewers. Uncovered valuable patterns in shared item reviews, enabling personalized product recommendations to community members.

Color Guessing Game OO | HTML, CSS, Javascript, Bootstrap

Oct. 2021 - Dec. 2021

• Deployed interactive color guessing game on Netlify for seamless access. The game adapts difficulty based on RGB color box count, providing an engaging and challenging user experience.

Technical Skills

Languages: Python, C/C++, HTML/CSS

Familiar Tools: Git/GitHub, DagsHub, DVC, MLflow, Docker, Kubernetes, Kubeflow.

Machine Learning and NLP: LLM, Sklearn, Keras, CNN, RNN, LSTM, NLTK, Transformer, Prompt Technique, RAG, TensorFlow, Networkx, MatplotLib, Pandas, Numpy, Pytorch.

Scholastic Achievements And Position of Responsibility

- Secured the 1st Rank in the college year 2018-2019
- Qualified GATE in **2021 and 2022**.
- Achieved the certificate of excellence in C++ and DSA from Coding Ninja.
- Solved 500+ DSA problems across all platforms including GFG, LeetCode, and HackerRank.
- TA: Data structure Using Python under Prof. Kushum kumari Bharti.
- TA: Introduction to Data Science Using Python under Prof. Ayan Seal.
- TA: Design and Analysis of Algorithms under Prof. Avinash Chandra Pandey.
- TA: Computer Programming in C under Prof. Vinod Kumar Jain.
- TA: Computer Network under Prof. Neelam Dayal.