HITESH KUMAR

+91-78149-03791 Github hkbatish592002@gmail.com LinkedIn

ABOUT ME

An AI enthusiast with practical expertise in machine learning, deep learning, natural language processing, and reinforcement learning. I like creating intelligent systems that address real-world issues, such as predictive analytics, game-playing agents, and transformer-based language models. knowledgeable about PyTorch, LangChain, RAG and Python. Passionate about researching and using AI to create scalable, meaningful solutions. also skilled in producing interactive demonstrations to successfully showcase AI projects.

EDUCATION

2022 - 2026 **Chandigarh University**
Bachelor of Engineering in Computer Science & Technology

2019 - 2021 **Police D.A.V Public School**
Senior Secondary

PROJECTS

YouTube Transcript Q&A Agent using LangChain and RAG:
Built a chatbot that fetches transcripts from YouTube videos and enables question answering using LangChain and Retrieval-Augmented Generation (RAG).

Sentiment Analysis on Movie Reviews:
Using LSTM-based neural networks, developed an NLP model to categorize sentiments from IMDB reviews.· Tokenization and embeddings were used to preprocess the text; a high F1-score was obtained on test data. Technologies: NLTK, LSTM, PyTorch

Reinforcement Learning on Snake Game:
Trained an AI agent to play the classic Snake game using Proximal Policy Optimization (PPO), with an emphasis on reward shaping, exploration-exploitation tradeoff, and policy updates. Technology: PyTorch

LLM-Powered AI Agent using Relevance AI:
Built and deployed AI Agent using *Relevance AI* that takes a URL of a company and the LinkedIn profile of an official and scrapes data from them. Finally, it prepares a sales pitch for a call with the official

Customer Segmentation using K means:
For targeted marketing, used K-Means clustering to group customers according to their purchasing patterns.· Used Seaborn to visualize clusters and applied PCA for dimensionality reduction. Technologies: Pandas, Seaborn and Scikit-learn

Research & Advanced Exploration: GPT-Transformer
Re-implemented and examined core elements of the Transformer architecture , with an emphasis on the scalability, training flow, and intuition issues mentioned in the *"Attention is All You Need"* paper.

SKILLS

- Python
- Google Colab
- Pandas
- PyTorch
- LangChain
- NumPy
- RAG
- Sci-kit learn
- C++
- Streamlit
- Matplotlib
- SQL

CERTIFICATIONS

Introduction to ML(NPTEL): Gained hands-on knowledge of supervised & unsupervised learning, decision trees, clustering, and evaluation metrics. *LINK*

Introduction to DL(NPTEL): Learned fundamentals of neural networks, backpropagation, CNNs, and RNNs with real-world applications. *LINK*

Introduction to Information Security(NPTEL): Covered cryptography, authentication, network security, and intrusion detection techniques.