Yuvraj Singh

EXPERIENCE

Clinical AI Assistance | Research intern

Dec. 2023 – Present

- Used HuggingFace API to use various LLMs to test our generated response to the original ones
- Data Gathering and cleaning
- Data Analysis
- · Model Building

SKILLS

Languages: C++, Python, Dart LATEX

Frameworks: Tensorflow, Keras, Flutter, Flask

NLP: RNN, LSTM, Bi-LSTM, Word2Vec, Fasttext, LLMs

Machine Learning: Supervised and Unsupervised Algorithms (Clustering)

Deep Learning: ANN, CNN, OpenCV, YOLOv8,

Tools:Streamlit, Git, Github, Render, GCP, HuggingFace API

PROJECTS

MoviesMania | Improved Movies Recommendation System (Geek-o-thon @IIIT-BH)

2023

- * Role: Team Lead
- * Vision/Goal: To provide an interface to users to find similar movies/web-series recommendations based on an uploaded video clip/YT Short.
- * Solution: To make use of the various faces of actors in the provided clip and the details provided (title, genre, plot) for the prediction of the movie's title (if available in the dataset) or similar movies/web series.
- * **Result**: Prediction of movie's title(if available in the dataset) with 78% accuracy and similar movies with 85% accuracy.
- * Tools: Keras, Tensorflow, Word2Vec (Word Embeddings), MTCNN, NLTK, Spacy, VGGFace, OpenCV, Streamlit, Render

News App | Multi-class News Classification WebApp (Proof of Concept

2023

- * Vision/Goal: To provide an interface for users to find news under certain categories such as Tech, World, Business and Sports
- * Solution: Made use of the AGI news Kaggle dataset, NLP-based preprocessing techniques along with custom-trained Word2Vec model along with Bi-LSTM model.
- * **Result**: Successfully built the said WebApp with Streamlit as front-end. Achieved an accuracy of 91% with precision 91% and recall 90%
- * Tools: Keras, Tensorflow, Word2Vec (Word Embeddings), Bi-LSTMs, NLTK, Spacy, Streamlit, Render

Movie Review System WebApp | Spoiler-Free Sentiment-Analysis based Movies Review System

2023

- * Vision/Goal: To provide an interface to allow users to read spoiler-free reviews along with a touch of sentiment analysis (on reviews) for a better viewing experience.
- * Solution: Made use of the a Machine Learning model (sentiment analysis) using Voting Classifier (SVC+Logistic Regression) and Deep learning model (spoiler v/s non-spoiler) using Bi-LSTMs after thorough preprocessing and custom trained Word2Vec
- * **Result**: Successfully built the said WebApp with Streamlit as front-end. Achieved an accuracy of 91 % with precision 91 % and recall 90%
- * Tools: Keras, Tensorflow, Word2Vec (Word Embeddings), Bi-LSTMs, NLTK, Spacy, Streamlit, Render

EDUCATION

IIIT Bhubaneswar June 2027

BTech Computer Science Engineering

Delhi Public School 2022-23

CBSE Grade 12 Percentage: 91

Amity International School 2021-22

CBSE Grade 10 Percentage: 96

ACHIEVEMENTS

Geek-o-thon (D3 @IIIT-BH)

Led the winning project (MoviesMania) at D3 2023, inter-college hackathon in AI/ML domain

JEE Mains 2023

Secured 97.7 percentile in JEE Mains 2023

SOF IMO 2019

International Rank 6 @SOF IMO

SOF IMO

Medal of Distinction

SOF IMO

Gold Medal in National Mathematical Olympiad Contest