Himanshu Tiwari

9/131, Street No 10, Dharam Vihar, Bahadurgarh, Haryana - 124507
+91-9896389692 himanshutiwari10112005@gmail.com Himanshu Tiwari github.com/himanshutiwari2005

Education

Vivekananda Institute of Professional Studies **2023 – Present**
Bachelor of Technology in Artificial Intelligence and Data Science *Pitampura, New Delhi*

Senior Secondary (Class XII), CBSE **2022**
Sainik Public School, PCM *Bahadurgarh, Haryana*

Secondary School (Class X), CBSE **2020**
Sainik Public School *Bahadurgarh, Haryana*

Relevant Coursework

- Fundamentals of Machine Learning
- Deep Learning and Neural Networks
- Linear Algebra and Matrix Computations
- Probability, Statistics, and Data Analysis
- Introduction to Artificial Intelligence
- Programming for Data Analysis (Python)
- Algorithms and Data Structures
- Computer Vision Applications
- Natural Language Understanding
- Computational Thinking and Problem Solving

Projects

Text Summarizer | *Python, NLTK* **April 2023**
- Built a basic text summarizer capable of both extractive and abstractive summarization using Python libraries.
- Implemented extractive techniques using sentence scoring and keyword frequency analysis.
- Explored abstractive summarization using pre-trained transformer models for natural language generation.

SignIt: Speech-to-Sign Language Converter | *Python, Flask, NLTK* **August 2023**
- Developed a backend system that converts spoken English into grammatically correct Indian Sign Language (ISL) sentences.
- Designed a rule-based parser to transform standard English SVO (Subject-Verb-Object) structures to ISL SOV (Subject-Object-Verb) format.
- Enabled real-time sentence conversion through a lightweight Flask API for integration with mobile apps.

Music Recommendation System | *Python, Scikit-learn, Pandas* **January 2024**
- Created a music recommendation system that suggests similar songs based on user preferences.
- Used CountVectorizer to compute feature vectors from song metadata such as genre, artist, and lyrics.
- Implemented cosine similarity to generate top-N recommendations for a given input song.

Technical Skills

Languages: Python, SQL
Libraries: NumPy, Pandas, Seaborn, Matplotlib, Scikit-learn
Tools & Platforms: Jupyter Notebook, VS Code, Google Colab, GitHub
Technologies/Frameworks: Flask, TensorFlow

Extracurricular

Smart India Hackathon 2024 **March 2024**
Team Member – Sign Language Recognition Project *National Level*
- Built and trained a Convolutional Neural Network (CNN) model to recognize Indian Sign Language signs from image input.
- Improved model performance from 66% to 96% accuracy through hyperparameter tuning, data augmentation, and architectural refinement.
- Collaborated with a team to develop a scalable solution for enhancing accessibility for individuals with hearing impairments.