

Dnyanesh Kavate

dnyaneshkavate@gmail.com | github.com/codefever1912 | +91 7722077515

Education

Vellore Institute of Technology, Bhopal

B. Tech, Department of Computer Science and Engineering

M.S Gosavi College of Science and Commerce, Nashik

Class XII, HSC

Wisdom High International School, Nashik

Class X, IGCSE

September 2022 - Present

CGPA: 8.21

June 2020 – March 2022

Percentage: 71.83%

June 2013 – March 2020

Percentage: 78.88%

Projects

SignSense – ASL converter | TensorFlow, OpenCV, Mediapipe, Flask, React, JS

- Designed and developed a real-time solution for translating American Sign Language (ASL) gestures into text, helping real-time communication for the hearing-impaired
- Trained on a dataset of over 72k images using a stacked architecture, achieving an accuracy of 99.22%
- Deployed a scalable, full-stack application using Flask and React.js for seamless user interaction

Text summarization using BART and Llama | PyTorch, HuggingFace, Transformers, Llama-7b

- Developed an AI-powered text summarization tool using BART and LLaMA-7b, enhancing readability of news articles and reports.
- Fine-tuned on CNN/DailyMail dataset, ensuring concise & accurate summaries
- Optimized BART-base model for low resource usage for smooth on-device inferencing
- Applied quantization for better memory usage while retaining accuracy

Sentiment Analyzer | PyTorch, Kaggle, NLTK, Word2Vec

- Developed a sentiment analysis model, analyzing user emotions of social media on various topics, achieving over 83% accuracy
- Trained on the Sentiment140 dataset, using NLTK tokenization and Word2Vec vectorization for better semantic retention
- Optimized data pipeline to handle large-scale datasets efficiently

Technical Skills

- **Programming Languages:** C++, Python, C, Java
- **Machine Learning & AI:** PyTorch, Transformers, TensorFlow Keras, Hugging Face, Kaggle
- **Natural Language Processing:** NLTK, BERT, Quantization
- **Computer Vision:** Torchvision, OpenCV, Mediapipe
- **Full-Stack Development:** Django, Flask, REST APIs, SQL, ReactJS, HTML5, CSS3
- **Data Analysis & Processing:** Pandas, NumPy, scikit-learn, Matplotlib, Seaborn
- **Fundamentals:** Object-Oriented Programming (OOP), Data Structures and Algorithms (DSA)
- **Development Tools:** Git, GitHub, Docker, VS Code, Google Colab, Neovim

Co-Curricular

- Achieved N4 level proficiency in Japanese, demonstrating both conversational and writing abilities

- Solved 500+ questions in competitive programming over various platforms like CodeForces, LeetCode and AtCoder
- Co-authored several research papers on AI applications(e.g. SignSense) with my colleagues, reflecting collaboration and contributions to ML & NLP advancements

Certifications

- NPTEL cloud computing, IIT Kharagpur – May 2024