PRANESH S

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• GitHub • LinkedIn

Passionate B. Tech pre-final year student specializing in Artificial Intelligence and Machine Learning at Bannari Amman Institute of Technology, Sathyamangalam, Erode. Proficient in Python, C, Java, SQL, and experienced in Machine Learning and CS Fundamentals.

Projects

Designed and implemented a WhatsApp chat-based conversational chatbot using GPT-2, fine-tuned with QLoRA (4-bit quantization) to optimize memory usage and training efficiency on RTX 3050 (6GB VRAM).

Utilized TF-IDF + Cosine Similarity to enhance input-response matching, improving chatbot fluency in Tamil-English (Tanglish) conversations. Preprocessed large-scale WhatsApp chat data by filtering messages, removing media logs, and structuring input-output pairs for effective GPT-2 fine-tuning.

Developed an interactive chatbot interface using Gradio, enabling real-time conversations with improved contextual understanding and response coherence.

Designed and implemented a machine learning model for emotion detection utilizing BERT (Bidirectional Encoder Representations from Transformers), improving sentiment analysis accuracy and performance.

Utilized Jupyter Notebook for developing and fine- tuning machine learning models, including BERT Bidirectional Encoder Representations from Transformers) for emotion detection tasks.

Developed an emotion detection model using the BERT Bidirectional Encoder Representations from Transformers) architecture to analyze sentiment in text, improving natural language processing accuracy.

Engineered a Telegram chatbot using Python that mimics user conversations by analyzing past chat logs, enhancing conversational AI capabilities.

Utilized Railway for cloud deployment, ensuring seamless and scalable bot operation with minimal downtime.

Developed a chat-mimicking algorithm that processes WhatsApp chat logs to generate responses similar to user messaging patterns, improving automated conversation flow.

Skills

Machine Learning • Deep Learning • NLP • Transformers (GPT-2, GPT-3) • Chroma DB • Python Programming (Basics) • SQL • OOPS • C Programming • Java Programming • Networks • MCP (Model Contex Protocol) • YAML • Git • Cloud Computing • Docker

Education

NOV. 2022 - PRESENT

Bachelor of Technology in Artificial Intelligence and Machine Learning | Bannari Amman Institute of Technology | Sathyamangalam, Erode

7.73 CGPA • Upto 5th Semester

Areas of Interest

Artificial Intelligence Machine Learning • Large Language Models • Generative AI • AI Agents • Vector Database • Software Development • Cloud Computing • Database Management and Design • Object Oriented Programming

Languages

English (R-W-S) • Tamil (R-W-S)