

Project Title

Deployment GUVI GPT Model using Hugging Face

Objective

To deploy a pre-trained or Fine tuned GPT model using HUGGING FACE SPACES and making it accessible through a web application built with Streamlit web application.

Skills Take Away

- Python
- My SQL
- Deep Learning
- Transformers
- Hugging face models
- **\$ LLM**
- Streamlit

Overview

Data Extraction & Preparation:

Collecting or Extracting the Data of GUVI EdTech Company from various sources like,

GUVI webpage, LinkedIn, Wikipedia, GitHub, FB, Instagram etc.

 After Collecting the data, the data preparation is done by eliminating the special characters, unwanted spaces etc.

Tokenization:

Using GPT-2 Tokenizer to convert the text data into tokens and ensuring the data is

tokenized consistently to match the pre-trained model's requirements.

Overview

Model Training & Fine Tuning:

- Taking a Pre Trained GPT-2 Text Generator Model.
- •Use the Hugging Face Transformers library to fine-tune the GPT-2 model based on the prepared dataset.
- •Monitoring the training process to prevent overfitting and ensuring the model generalizes well to new data.

Overview

Database Connection:

Creating a database in My SQL (TIDB Cloud server) to collect and store the Entry Data of Users.

Deployment:

- Deploying the Fine Tuned model in Hugging Face Platform.
- Creating a scalable and secure web application using Streamlit & making the model accessible to users over the internet.
- Deployment URL: https://huggingface.co/spaces/Arivu16/Guvi_GPT_Model

Portfolio

GitHub:

• https://github.com/Arivalagan16

LinkedIn:

https://www.linkedin.com/in/arivalagan-lawrence-878438315/

