Partho Das

Passionate and quick learner, with focus areas of NLP and Diffusion models. Proven track record of contributing to OSS, developing and deploying apps rapidly, and working in teams. Looking to work with a supportive and innovative organization working in the field of Deep Learning to grow and make meaningful contributions.

github.com/daspartho parthodas6176@gmail.com daspartho.github.io +91 730-7269-793

Projects

Prompt Extend

github / demo

Text-Generation model to help with prompt engineering by generating suitable style cues for Stable Diffusion prompts, resulting in better image generations.

- Processed the diffusiondb dataset for the purpose of the project.
- Trained a new tokenizer and a GPT-2 model on the dataset of stable diffusion prompts for generating style cues.
- Uploaded the model on HuggingFace Hub gaining 30k downloads.
 Created a Gradio app for demo and hosted on HuggingFace Hub.

MagicMix

github / demo

Implementation of MagicMix: Semantic Mixing with Diffusion Models paper. This technique allows for mixing two different concepts in a semantic manner to create a new concept using Diffusion Models.

- Implemented the paper in PyTorch using components from the diffusers library and successfully reproduced results from the paper.
- Added the implementation as a community pipeline to the diffusers library. Also deployed the implementation demo on HuggingFace Spaces.

Predict Subreddit

github / demo

Multi-class text classification model to predict the subreddit of a post based on its title.

- Wrote python scripts to scrape posts from top subreddits and cleaned and processed the collected data to be used to train model.
- Fine-Tuned DistilBERT model on the collected dataset of post title pairs from top the 250 subreddits using huggingface transformers library.

Skills

Deep Learning, Natural Language Processing, Web Scraping, Data Wrangling

Python, SQL, JSON, JavaScript, HTML, CSS

PyTorch, FastAI, Pandas, Numpy, HuggingFace, Gradio, Streamlit, Flask, Regex

Git, GitHub, Jupyter, VS Code, Bash, Linux, AWS, CI/CD

Open Source Contributions

huggingface/transformers huggingface/diffusers

Achievements

Selected as a recipient for the FastAI 2022 scholarship.

Third place in a national coding competition and runner-up in a state level coding competition.

My team's project Dreamixer for creating comic strips from text placed in the top 3 at the Stable Diffusion Hackathon.