

20/6

• Types of LLMs

- Base LLM
- Instruction Tuned LLM

□ Base LLM

- Predicts next word, based on text training data.

□ Instruction Tuned LLM

- Tries to follow instructions
- Fine tune on instructions & good attempts at following those instructions. RLHF
- Further refine using RLHF

Advantage

- Less likely to output problematic text such as toxic O/T's compared to base LLM.
- Helpful, Honest, Harmless
- For Used for most practical applications today.

• Prompt Engineering

□ Providing context

- Increases Accuracy
- Simplifies chat
- Personalizes response

□ Using Delimiters

Example 1:

Summarize the following article for a 10th grader.

" " "

Jupiter the largest...

" " "

Example 2:

Increase the following fn. using

lru_cache

```python

def fib(n):

... ..

### □ Use detailed Instructions

- Give details.

### □ Splitting Up Tasks

- Get Chat GPT to plan
- Start a new chat
- Summarize then process.

### □ Custom Instructions

- You can now give abrupt prompts

## ❑ Socratic Prompting

- Asking chatGPT qtn to improve o/t quality through reasoning.

- Keep humans in the loop
- Document severe hallucinations

## ◦ Getting chatGPT to Ask

Example:

You are a branding expert. Come up with 5 brand names. Ask me questions (one each time) until you have all the necessary info.

## ❑ Advanced Techniques

- Personas
- Socratic prompting
- Multimodality

## ❑ DALL-E

- A diffusion Model
- Leverages transformer model architecture
- Trained with a large dataset of image /caption pairs.

## ❑ Hallucinations

Dealing with hallucinations

- Always verify chatGPT o/t.
- Do not use code o/t that you do not understand.