

ChatGPT Prompt Engineering for Developers

Base LLM

Predicts next word
based on next training
data.



Instruction Tuned LLM

Fine tuned on instructions.

► Prompting Principles

- Principle 1: Write clear and specific instructions.
 - Tactic 1: Use delimiters to ^{clearly indicate} distinct parts of the input.
 - Tactic 2: Ask for structured output (e.g. JSON, HTML)
 - Tactic 3: Ask the model to check whether conditions are satisfied.
 - Tactic 4: "Few-shot" prompting - Answer in a consistent style.
- Principle 2: Give the model time to "think"
 - Tactic 1: Specify the steps required to complete a task.
 - Tactic 2: Instruct the model to work out its own solution before rushing to a conclusion.

► Model Limitations: Hallucinations.

► Iterative Prompt development.

- Try something. (e.g. marketing product description).
- Analyse whether the result gives you what you want. (e.g. long text, focusing on wrong details)
- Clarify instructions, give more time to think.
- Refine prompts with a batch of examples.

► Summarising (Cabrality 1)

- Summarise a text. (e.g. product review)
- Summarising with focus on shipping and delivery ... or on price and value.
- Try "extract" instead of summarise.
- Summarise multiple product reviews

► Inferring (Capability 2)

- Sentiment (positive/negative)
- Identity types of emotions (happy, satisfied, grateful...)
- Extract product and company name from ^{customer} reviews.
- Doing multiple tasks at once.
- Inferring topics from a story.
- Assign stories to topics (e.g. topic list)
- Make alerts for certain topics

► Transforming (Capability 3)

- Translation / Universal Translator
- Tone transformation
- Format conversion (e.g. JSON to HTML)
- Spellcheck / Grammar check.

► Expanding (Capability 4)

- Customise the automated reply to a customer email.
- Introduce the "Temperature" parameter.

► The Chat Format

- The Setup.
- OrderBot.

