Recommended Resources

- Prompt Engineering Course
- Learn Prompting Guide

Find the detailed version of this roadmap and more roadmaps with resources

https://roadmap.sh

Prompt Engineering

Introduction to Prompting

- Basic Prompting
- Need for Prompt Engineering

Basic LLM Concepts

- What are LLMs?
- Types of LLMs
- How are LLMs Built?
- Vocabulary

Prompts

Writing Good Prompts

- Use Delimiters to distinguish the data from the prompt.
- Ask for Structured Output e.g. JSON, XML, HTML etc.
- Include style information to modify the tone of output.
- Give conditions to the model and ask if they are verified.
- Give successful examples of completing tasks then ask.
- Specify the steps required to perform a task.
- Instruct model to work out its own solution before giving answers.
- Iterate and Refine your prompts.

Prompting Techniques

- Role Prompting
- Few Shot Prompting
- Chain of Thought Prompting
- Zero Shot Chain of Thought
- Least to Most Prompting
- Dual Prompt Approach
- Combining Techniques

Parts of a Prompt

Real World Usage Examples

- Structured Data
- Inferring
- Writing Emails
- Coding Assistance
- Study Buddy
- Designing Chatbots

Pitfalls of LLMs

- Citing Sources
- Bias
- Hallucinations
- Math
- Prompt Hacking

Improving Reliability

- Prompt Debiasing
- Prompt Ensembling
- LLM Self Evaluation
- Calibrating LLMs
- Math

LLM Settings

- Temperature
- Top P
- Other Hyperparameters

Image Prompting

- Style Modifiers
- Quality Boosters
- Weighted Terms
- Fix Deformed Generations

Prompt Hacking

- Prompt Injection
- Prompt Leaking
- Jailbreaking
- Defensive Measures
- Offensive Measures

Keep Learning