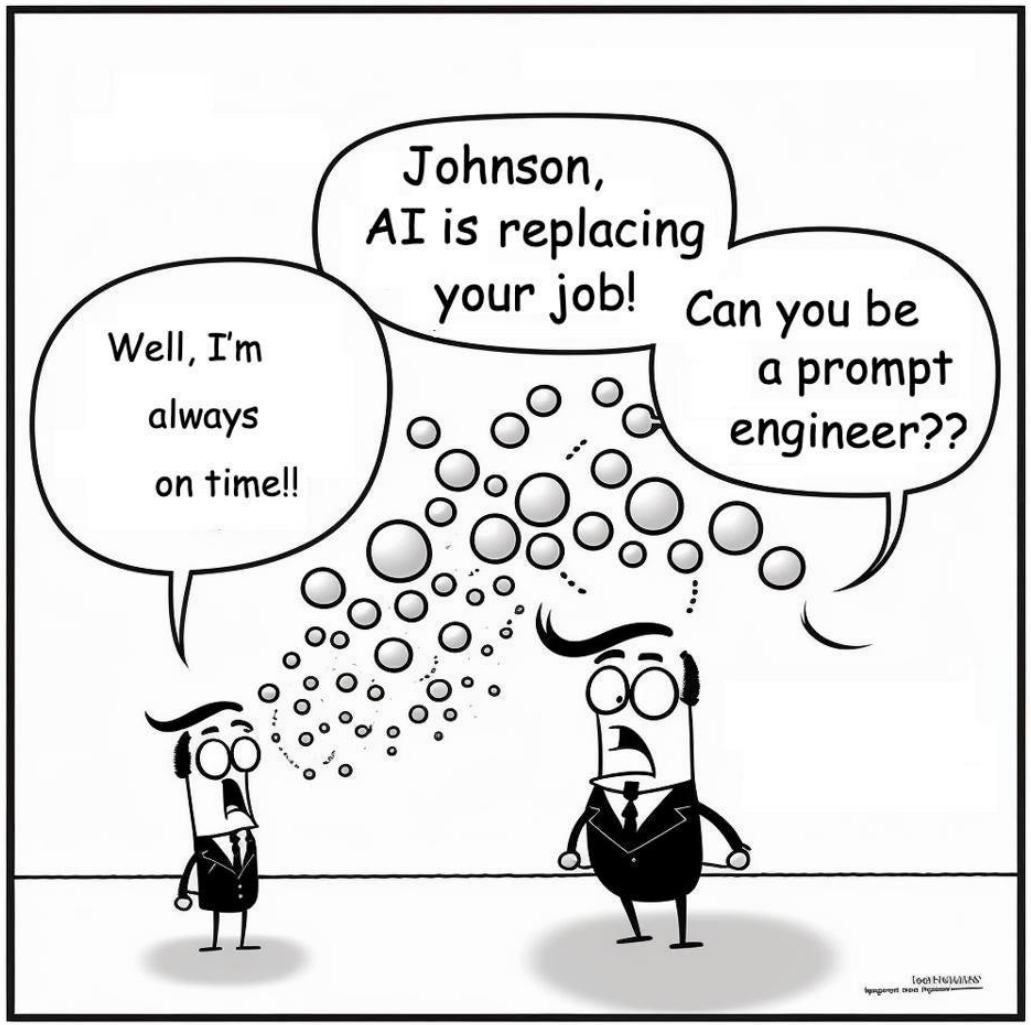
Part 3.
프롬프트 엔지니어링 개요

Prompt Engineering

Fast campus

the Red.

Prompt Engineering

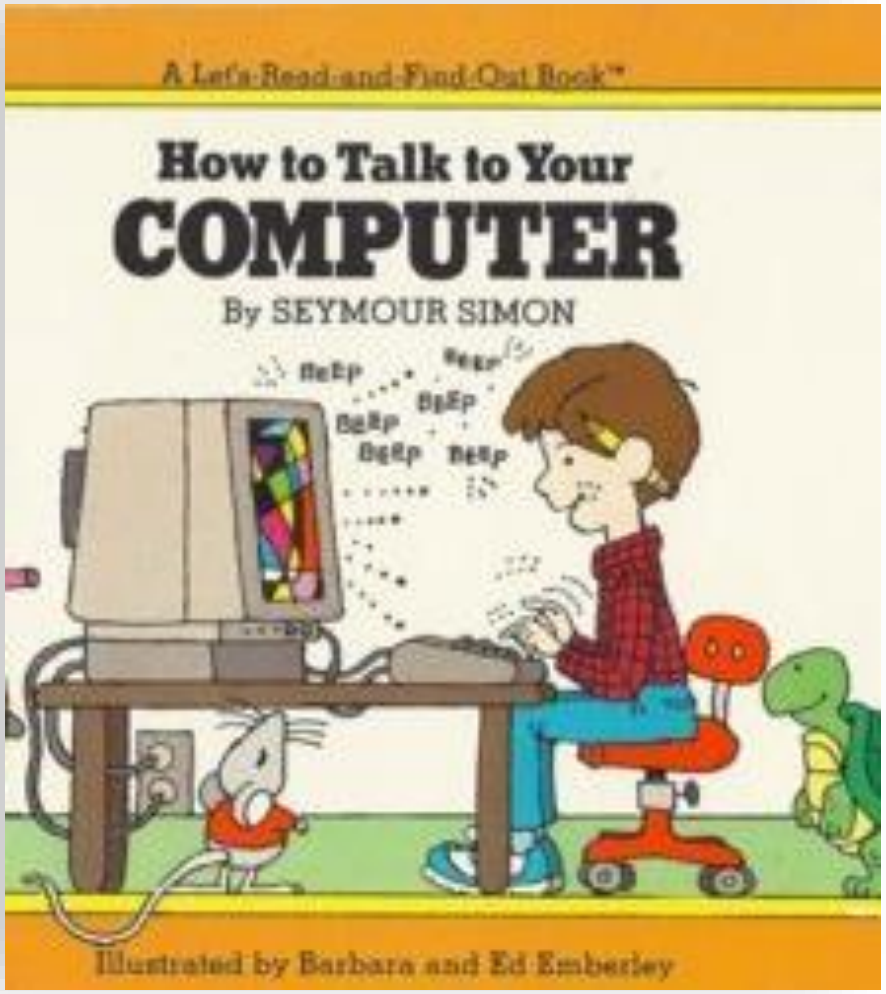

Johnson,
AI is replacing
your job!
Can you be
a prompt
engineer??
Well, I'm
always
on time!!

Prompt Engineering

What is it?

How to give commands to AI

New way to coding



여보 마트가서 우유사고
만약에 아보카도있으면
6개사와.
아보카도
있었어

DALL-E

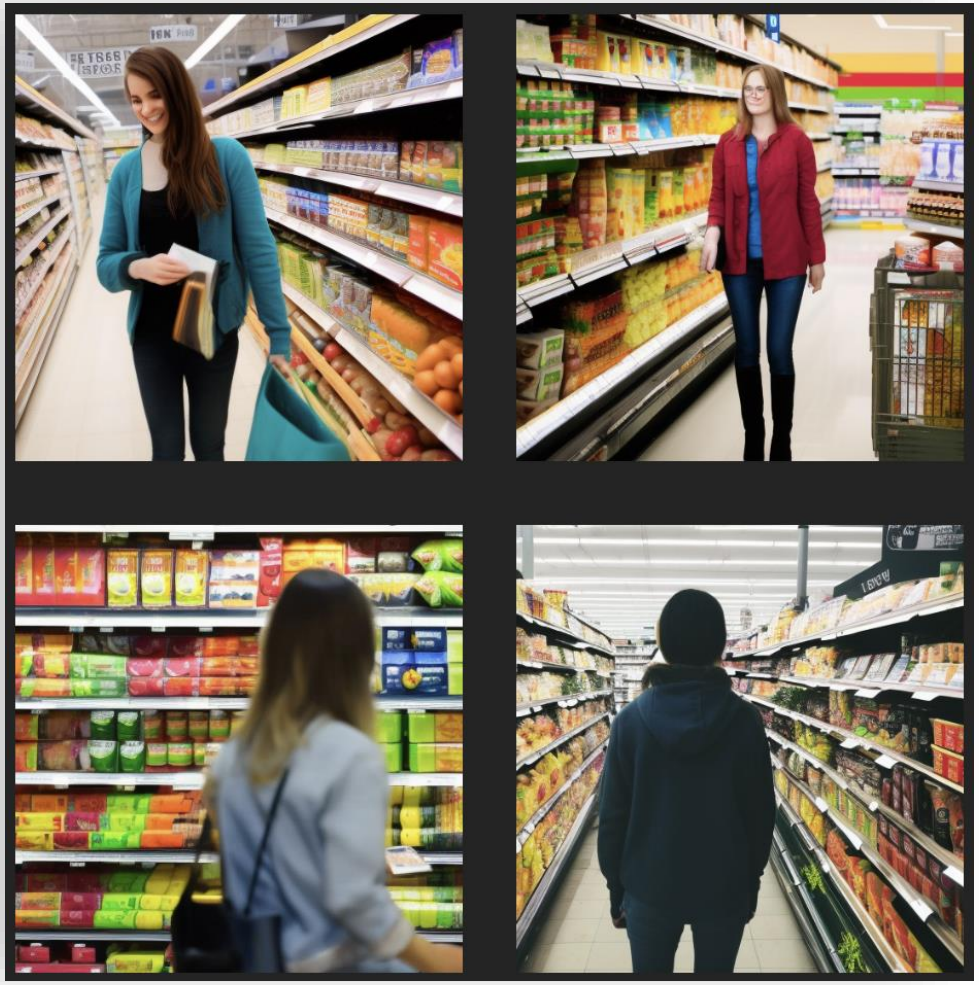
Prompt Engineering

Frame

- A person in a Grocery Store

Subject

Style



DALL-E

Prompt Engineering

Frame

- A person in a Grocery Store

Subject

- A woman pick an apple

Style

DALL-E

Prompt Engineering

Frame

- A person in a Grocery Store

Subject

- A woman pick an apple

Style

- In Van Gogh style

DALL-E

Prompt Engineering

Final Prompt

“
A person in a Grocery Store.
A woman pick an apple.
In Van Gogh style
”

LLM

Prompt Engineering

- **Zero-shot**
- One-shot learning
- Few-shot learning
- Chain of Thought
- Zero Shot Chain of Thought

Zero-shot

The model predicts the answer given only a natural language description of the task. No gradient updates are performed.

```
1  영어를 한국어로 번역해줘        ← task description
2  It's a beautiful day =>        ← prompt
```

LLM

Prompt Engineering

- Zero-shot
- **One-shot learning**
- **Few-shot learning**
- Chain of Thought
- Zero Shot Chain of Thought

One-shot

In addition to the task description, the model sees a single example of the task. No gradient updates are performed.

```
1  영어를 한국어로 번역해줘                    ← task description
2  This is an apple => 이것은 사과입니다       ← example
3  It's a beautiful day =>                    ← prompt
```

Few-shot

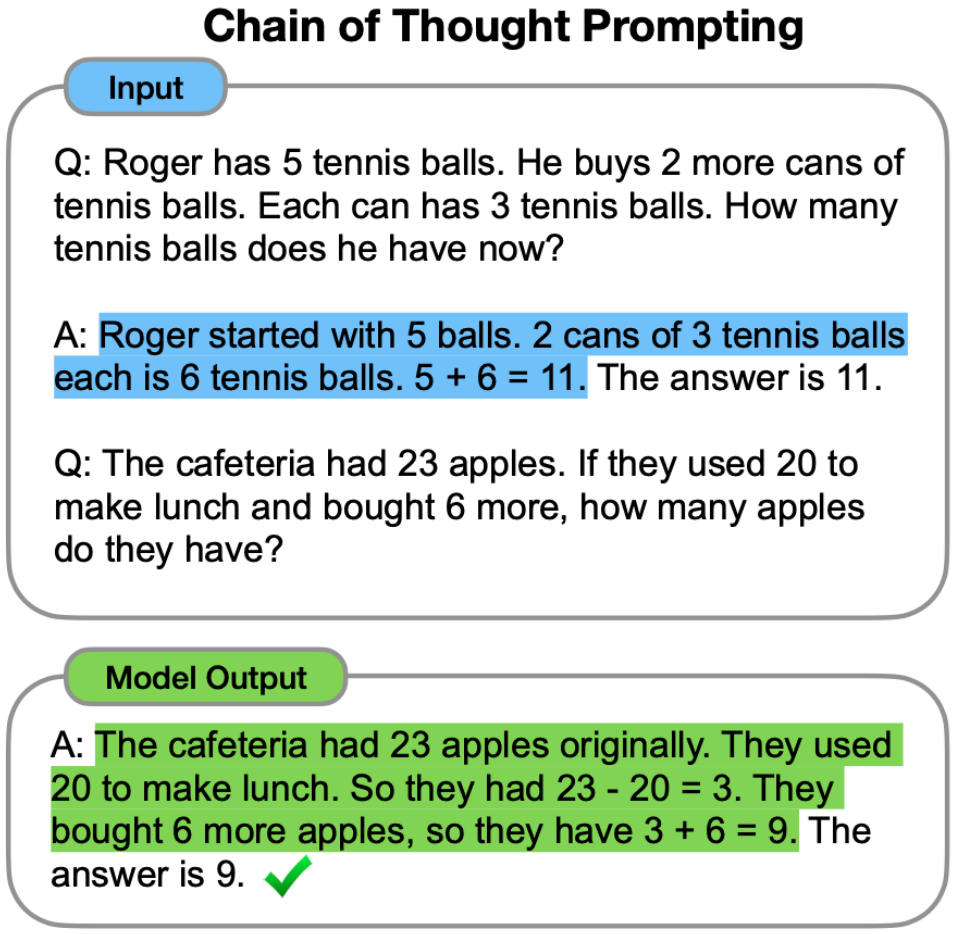
In addition to the task description, the model sees a few examples of the task. No gradient updates are performed.

```
1  영어를 한국어로 번역해줘                    ← task description
2  This is an apple => 이것은 사과입니다       ← examples
3  I am a boy => 나는 소년입니다               ←
4  You are a girl => 나는 소녀입니다           ←
5  It's a beautiful day =>                    ← prompt
```

LLM

Prompt Engineering

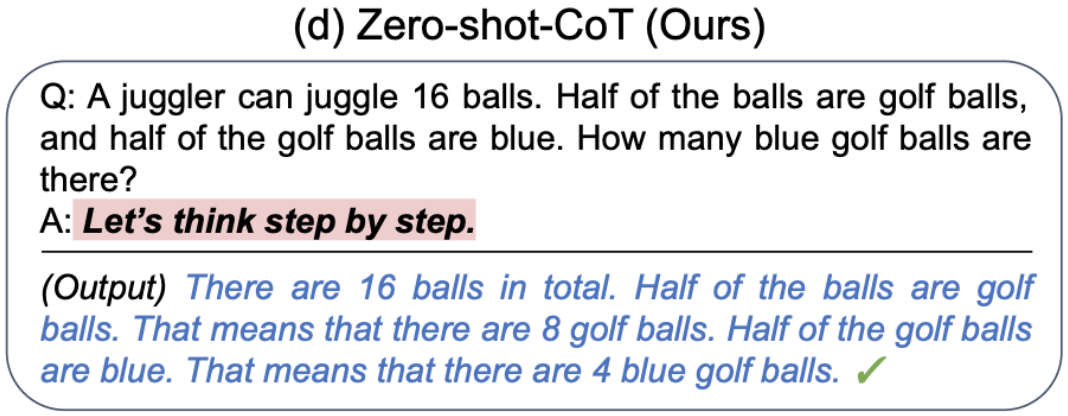
- Zero-shot
- One-shot learning
- Few-shot learning
- **Chain of Thought**
- Zero Shot Chain of Thought



LLM

Prompt Engineering

- Zero-shot
- One-shot learning
- Few-shot learning
- Chain of Thought
- **Zero Shot Chain of Thought**



LLM

Prompt Engineering

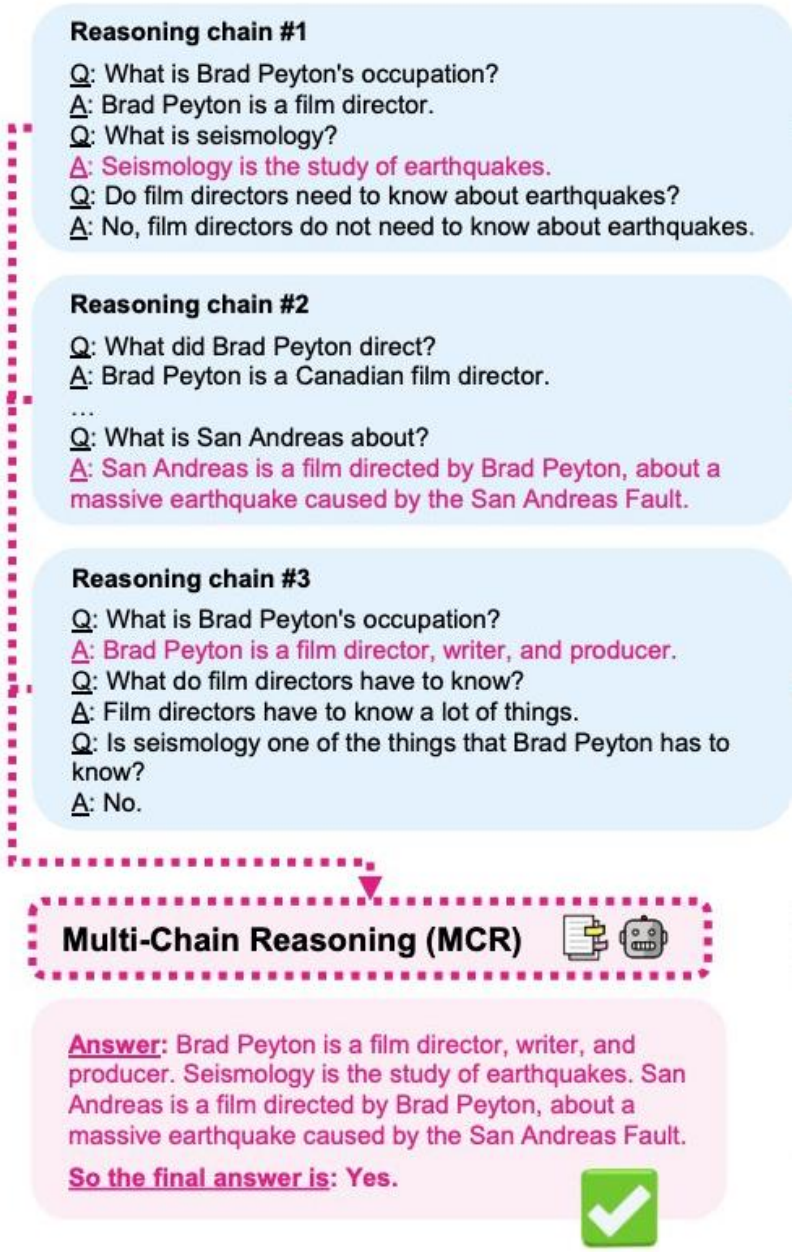
- Zero-shot
- One-shot learning
- Few-shot learning
- Chain of Thought
- Zero Shot Chain of Thought
- Self Consistency
- Meta-Reasoning over Multiple Chains
- Generated Knowledge Prompting
- Synthetic prompting

- Automatic Prompt Engineer (APE)
- Active-Prompt
- Directional Stimulus Prompting
- MRKL
- ReAct Prompting
- PAL (Program-Aided Language Models)
- Multimodal CoT
- Graph Prompting
- Prompt Ensembling
- ART (Automatic Reasoning and Tool-use)
- Self Evaluation
- Self Refine
- Automatic Prompt Engineer

LLM

Prompt Engineering

- 답변을 위해 필요한
  적절한 컨텍스트 제공
- 원하는 결과를 추출을 위한
  프롬프트 작성
- 원하는 포맷의 출력을 위한
  프롬프트 작성



프롬프트 ✌ 엔지니어링 ✌

프롬프트 엔지니어링은 실험적 방법론에 기반하여,
한 번 그럴듯한 결과를 내는 것이 아닌, 원하는 결과를 정확히 의도한대로
항상 일관성 있게 내도록 만드는 것

프롬프트 엔지니어링이라고 하는 대부분의 예시는
블라인드 프롬프팅, 혹은 프롬프트 라이팅이라고 함

결과와 평가 설계가 없어, 결과의 일관성, 정확성을 보장할 수 없음 → 기도하며 운에 맡김?
예) ChatGPT 사용법, 프롬프트 템플릿, Top 10 ChatGPT 프롬프트…

프롬프트 ✌ 엔지니어링 ✌

소프트웨어는 만드는 기간보다 유지보수 기간이 훨씬 더 길다

소프트웨어 개발에 있어 가장 중요한 것은,
다른 사람이 해당 소프트웨어의 목적을 이해하고 수정할 수 있도록 만드는 것

목적과 목표를 잘 정의하는 것과, 재현성을 위한 회귀 테스트가 중요함