Presenting... Prompt Engineering in Emacs

Shane Mulligan

<2021-03-01 Mon>

Following along

Repositories for following along

```
github1s.com/mullikine/presentation-prompt-engineering-in-emacs github1s.com/semiosis/examplary github1s.com/semiosis/pen.el github1s.com/semiosis/prompts github1s.com/semiosis/prompt-engineering-patterns github1s.com/minimaxir/gpt-3-client
```

Demo

1 ssh -oBatchMode=no shane@124.197.60.232 -p 9922

Text Generator

Background knowledge

- GPT-3 is a seq2seq model (a text generator)
 - It's stochastic but can be configured to be deterministic.

Key concepts

- prompt,
- completion, and
- tokens

Limitations

Combined, the text prompt and generated completion must be below 2048 tokens (roughly ~1500 words).

context-stuffing With only 2048 tokens, you need to make use of your real estate by providing instructions and making implicit information explicit.

Prompt Engineering

Characteristics

- declarative, like html
- stochastic, like problog
- Unlocks new types of applications
- Speeds up development

Prompts as functions

Some prompts I've made

generate-vim-command.prompt

```
Vim
3
   Insert "Q: " at the start of the line
    :%s/^/Q: /g.
5 ###
   Remove whitespace from the start of each line
    :%s/^\s*/\1/g
8 ###
    Join each line with the next line
10
    :1,$i
11
   ###
12
   Make all occurrences of Steve lowercase
13
    :%s/Steve/steve/g
14 ###
15
   <1>
```

Create a prompt

Ask the audience

Tutorials

https://www.twilio.com/blog/generating-cooking-recipes-openai-gpt3-ruby