

GPT Survey: A Programmer's Perspective

Yu Zehan

Intel FLEX

May 8, 2023

Outline

- 1 Lesson 1: Prompt Engineering: Principles, Techniques, and Extensions
- 2 Lesson 2: Case Studies of Coding Tasks with GPT
- 3 Lesson 3: Integrate GPT in Whole Coding Lifecycle
- 4 Lesson 4: Cutting-Edge GPT Projects and Showcases
- 5 Lesson 5: Customize GPT for More Power
- 6 References

GPT Survey: A Programmer's Perspective

Lesson 1: Prompt Engineering: Principles, Techniques, and Extensions

Yu Zehan

Intel FLEX

May 8, 2023

The Chat-GPT Cheat Sheet

Basic Structure of a Prompt:
Acting as a [ROLE] perform [TASK] in [FORMAT]

Act as a [ROLE]

Marketer
Advertiser
Mindset Coach
Best Selling Author
Therapist
Website Designer
Journalist
Inventor
Chief Financial Officer
Copywriter
Prompt Engineer
Accountant
Lawyer
Analyst
Ghostwriter
Project Manager

Create a [TASK]

Headline
Article
Essay
Book Outline
Email Sequence
Social Media Post
Product Description
Cover Letter
Blog Post
SEO Keywords
Summary
Video Script
Recipe
Sales Copy
Analysis
Ad Copy

show as [FORMAT]

A Table
A List
Summary
HTML
Code
Spreadsheet
Graphs
CSV file
Plain Text file
JSON
Rich Text
PDF
XML
Markdown
Gantt Chart
Word Cloud

Linked Prompting

- 1 - Provide me with the ideal outline for an effective & persuasive blog post.
- 2 - Write a list of Engaging Headlines for this Blog post based on [Topic].
- 3 - Write a list of Subheadings & Hooks for this same blog post
- 4 - Write a list of Keywords for this Blog.
- 5 - Write a list of Compelling Call-to-Actions for the blog post
- 6 - Combine the best headline with the best Subheadings, Hooks, Keywords and Call-to-Action to write a blog post for [topic]
- 7 - Re-write this Blog Post in the [Style], [Tone], [Voice] and [Personality].

Effective Use of this Powerful Tool Can Propel Your Business To The Forefront Of This Modern Business Landscape.

Prompt Priming

ZERO - "Write me 5 Headlines about [Topic]"
SINGLE - "Write me 5 Headlines about [Topic]. Here is an example of one headline: 5 Ways to Lose Weight"
MULTIPLE - "Write me 5 Headlines about [Topic]. Here is an example of some headlines: 5 Ways to Lose Weight, How to Lose More Fat in 4 Weeks, Say Goodbye to Stubborn Fat. Find a faster way to Lose Weight Fast"

Prompts For Biz Owners

- Give me a list of inexpensive ideas on how to promote my business better?
- Acting as a Business Consultant, What is the best way to solve this problem of [Problem].
- Create a 30 Day Social Media Content Strategy based on [Topic 1] & [Topic 2].

By @shanefozard

GPT Survey: A Programmer's Perspective

Lesson 2: Case Studies of Coding Tasks with GPT

Yu Zehan

Intel FLEX

May 8, 2023

GPT Survey: A Programmer's Perspective

Lesson 3: Integrate GPT in Whole Coding Lifecycle

Yu Zehan

Intel FLEX

May 8, 2023

GPT Survey: A Programmer's Perspective

Lesson 4: Cutting-Edge GPT Projects and Showcases

Yu Zehan

Intel FLEX

May 8, 2023

GPT Survey: A Programmer's Perspective

Lesson 5: Customize GPT for More Power

Yu Zehan

Intel FLEX

May 8, 2023

References I

1. SPQA: The AI-based Architecture That'll Replace Most Existing Software.
- <https://danielmiessler.com/blog/spqa-ai-architecture-replace-existing-software>
2. Introduction to prompt engineering - Azure OpenAI.
- **Introduction:** <https://learn.microsoft.com/en-us/azure/cognitive-services/openai/concepts/prompt-engineering>
- **Techniques:** <https://learn.microsoft.com/en-us/azure/cognitive-services/openai/concepts/advanced-prompt-engineering>
3. Azure OpenAI Service models.
- <https://learn.microsoft.com/en-us/azure/cognitive-services/openai/concepts/models>
4. Chat GPT For Programming: 100+ Coding Prompts For Chat GPT.
- <https://www.greataiprompts.com/chat-gpt/best-coding-prompts-for-chat-gpt>
5. Chat-GPT Cheat Sheet V2 : coolguides.
- **Reddit:** https://www.reddit.com/r/coolguides/comments/12ouw8o/chatgpt_cheat_sheet_v2
- **Cheatsheet:** <https://i.redd.it/eunvmybl9cua1.png>
6. StarCoder: A State-of-the-Art LLM for Code.
- **HuggingFace:** <https://huggingface.co/bigcode/starcoder>
- **GitHub:** <https://github.com/bigcode-project/starcoder>
- **Blog:** <https://huggingface.co/blog/starcoder>
- **Paper:** <https://drive.google.com/file/d/1cN-b9GnWtHzQRoE7M7gAEyivY0kl4BYs/view>
7. Harnessing the Power of LLMs in Practice: A Survey on ChatGPT and Beyond.
- **arXiv:** <https://arxiv.org/abs/2304.13712>
- **GitHub:** <https://github.com/mooler0410/llmspracticalguide>

References II

8. ChatGPT Prompt Engineering for Developers.
 - Official Course: <https://www.deeplearning.ai/short-courses/chatgpt-prompt-engineering-for-developers/>
 - Notebooks: <https://github.com/datawhalechina/prompt-engineering-for-developers/tree/main>
 - Bilibili: <https://www.bilibili.com/video/BV1No4y1t7Zn>
9. FlowGPT — the best ChatGPT prompts&AI prompts community.
 - <https://flowgpt.com/>
10. awesome-chatgpt-prompts: This repo includes ChatGPT prompt curation to use ChatGPT better.
 - GitHub: <https://github.com/f/awesome-chatgpt-prompts>
 - Webpage: <https://prompts.chat/>
 - HuggingFace: <https://huggingface.co/datasets/fka/awesome-chatgpt-prompts>
11. The Art of ChatGPT Prompting: A Guide to Crafting Clear and Effective Prompts.
 - <https://app.gumroad.com/d/e2e51298d50b8c1bd6c6950a6d11a772>
12. PGF/TikZ Manual.
 - PDF: <http://mirrors.ctan.org/graphics/pgf/base/doc/pgfmanual.pdf>
 - Online Doc: <https://tikz.dev/>
 - GitHub: <https://github.com/pgf-tikz/pgf>

