



窮人如何低資源 復刻自己的 ChatGPT

為什麼有人需要自己的 ChatGPT ？

Data usage for consumer services FAQ

Commonly asked questions about how we treat user data for OpenAI's non-API consumer services like ChatGPT or DALL-E



Written by Yaniv Markovski. Updated this week

Does OpenAI train on my content to improve model performance?

For non-API consumer products like ChatGPT and DALL-E, we may use content such as prompts, responses, uploaded images, and generated images to improve our services.

Please refer to this [article](#) to understand how this content may be used to improve model performance and how you can opt-out. You can request to opt out of having your content used to improve our services at any time by filling out this [form](#). This opt out will apply on a going-forward basis only.

<https://help.openai.com/en/articles/7039943-data-usage-for-consumer-services-faq>

為什麼有人需要自己的 ChatGPT ？

6. Will you use my conversations for training?

- Yes. Your conversations may be reviewed by our AI trainers to improve our systems.

7. Can you delete my data?

- Yes, please follow the [data deletion process](#).

8. Can you delete specific prompts?

- No, we are not able to delete specific prompts from your history. Please don't share any sensitive information in your conversations.

How can I delete my account?

... it may take up to 4 weeks for your request to be completed.

<https://help.openai.com/en/articles/6378407-how-can-i-delete-my-account>

<https://help.openai.com/en/articles/6783457-what-is-chatgpt>

低資源復刻 ChatGPT

- 需要準備甚麼呢？



You can fine-tune.



Access to ChatGPT

低資源復刻 ChatGPT

以 ChatGPT 為師

Self-Instruct

<https://arxiv.org/abs/2212.10560>

Knowledge Distillation

請修改以下文句文法錯誤

"I have a dogs."

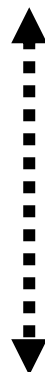


"I have a dog."

標準答案

自己的
Model

.....



低資源復刻 ChatGPT

Self-Instruct

<https://arxiv.org/abs/2212.10560>

連問題都是老師想的

任務：請修改以下文句文法錯誤
輸入：“I have a dogs.”
請想出更多可能的輸入



1. "I are good."
 2. "You am bad."
 3. "I have a apples."
-

連任務都要老師想

任務1：修改以下文句文法錯誤
任務2：潤飾以下文句
請想出更多任務

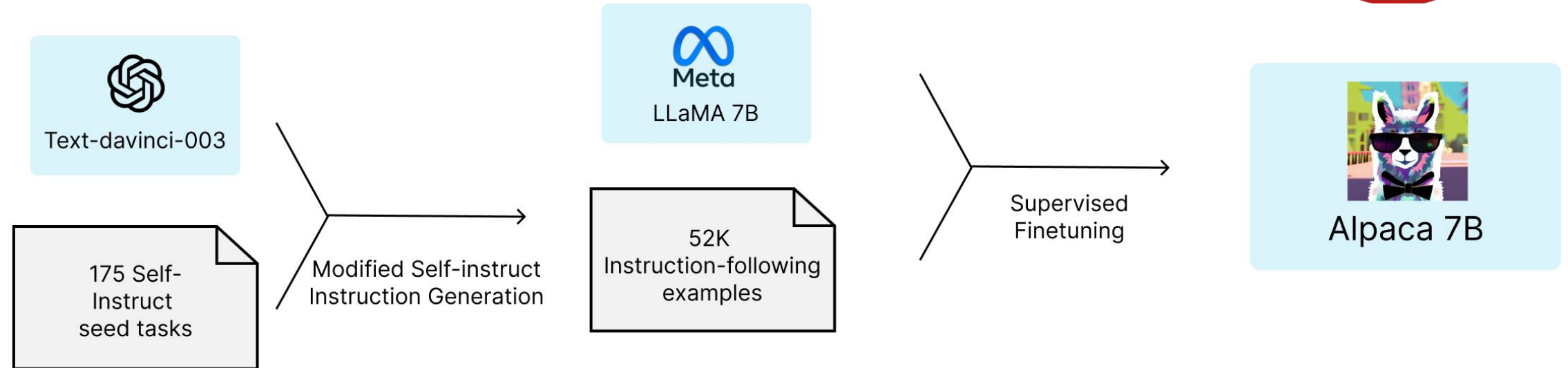


任務3：擴寫以下文句
任務4：修改以下文句
.....

低資源復刻 ChatGPT

https://github.com/tatsu-lab/stanford_alpaca

Stanford Alpaca



Example seed task
Instruction: Brainstorm a list of possible New Year's resolutions.
Output:
- Lose weight
- Exercise more
- Eat healthier

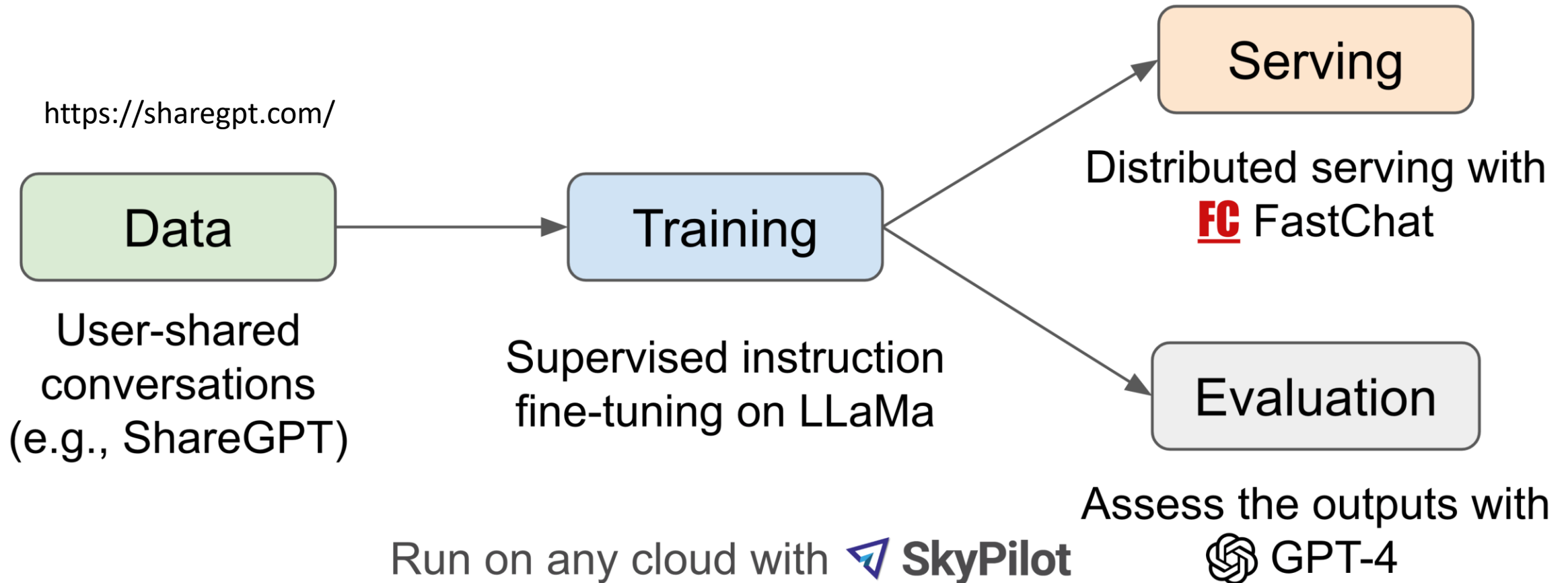
Example Generated task
Instruction: Brainstorm creative ideas for designing a conference room.
Output:
... incorporating flexible components, such as moveable walls and furniture ...

低資源復刻 ChatGPT

<https://github.com/lm-sys/FastChat>



Vicuna



GPT-4 Evaluation

According to a fun and non-scientific evaluation with GPT-4. Further rigorous evaluation is needed.

Question: Can you help me write a formal email to a potential business partner proposing a joint venture?

Assistant #1


Alpaca-13b

Yes, I can help you write a formal email to a potential business partner proposing a joint venture. Here's a template that you can use:

Subject Line: Proposing a Joint Venture

Dear [Name],

I am writing to propose a joint venture between our two companies. I be [Show more](#) combining our resources, we can create a powerful

 **Assistant #2 (Vicuna-13b, our model)**

Certainly, here's an example of a formal email proposing a joint venture:

Subject: Proposal for Joint Venture

Dear [Name of Partner],

I hope this email finds you well. I am writing to propose a joint venture be [Show more](#) panies, [Your Company Name] and [Partner

GPT-4 Evaluation (Score: Alpaca-13b 9/10, Vicuna-13b 10/10)

Both **Assistant 1** and **Assistant 2** provided helpful, relevant, and accurate responses to the user's request for a formal email proposing a joint venture. **Assistant 1** provided a concise and clear template that can be easily adapted by the user. **Assistant 2**, on the other hand, provided a more detailed and comprehensive email, including specific information about the proposed joint venture, such as the creation of a new company and the sharing of profits and losses. This level of detail may be more useful for the user, as it provides a more complete picture of the proposed partnership. Therefore, **Assistant 1** receives a 9 and **Assistant 2** receives a 10.

Model Name	LLaMA	Alpaca	Vicuna	Bard/ChatGPT
Dataset	Publicly available datasets (1T token)	Self-instruct from davinci-003 API (52K samples)	User-shared conversations (70K samples)	N/A
Training code	N/A	Available	Available	N/A
Evaluation metrics	Academic benchmark	Author evaluation	GPT-4 assessment	Mixed
Training cost (7B)	82K GPU-hours	\$500 (data) + \$100 (training)	\$140 (training)	N/A
Training cost (13B)	135K GPU-hours	N/A	\$300 (training)	N/A



3 hours on
8 80GB A100s

<https://vicuna.lmsys.org/>

Dolly 2.0

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https://docs.google.com/forms/d/e/1FAIpQLSfqNECQnMkycAp2jP4Z9TFX0cGR4uf7b_fBxjY_OjhJILIKGA/viewform

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Dolly 2.0

	GPT-2	GPT-3	GPT-Neo	OPT	T5	BLOOM	Pythia (ours)
Public Models	●	◐	●	●	●	●	●
Public Data			●		●	◐	●
Known Training Order			●			◐	●
Consistent Training Order				●		◐	●
Number of Checkpoints	1	1	30	2	1	8	154
Smallest Model	124M	Ada	125M	125M	60M	560M	19M
Largest Model	1.5B	DaVinci	20B	175B	11B	176B	12B
Number of Models	4	4	6	9	5	5	8

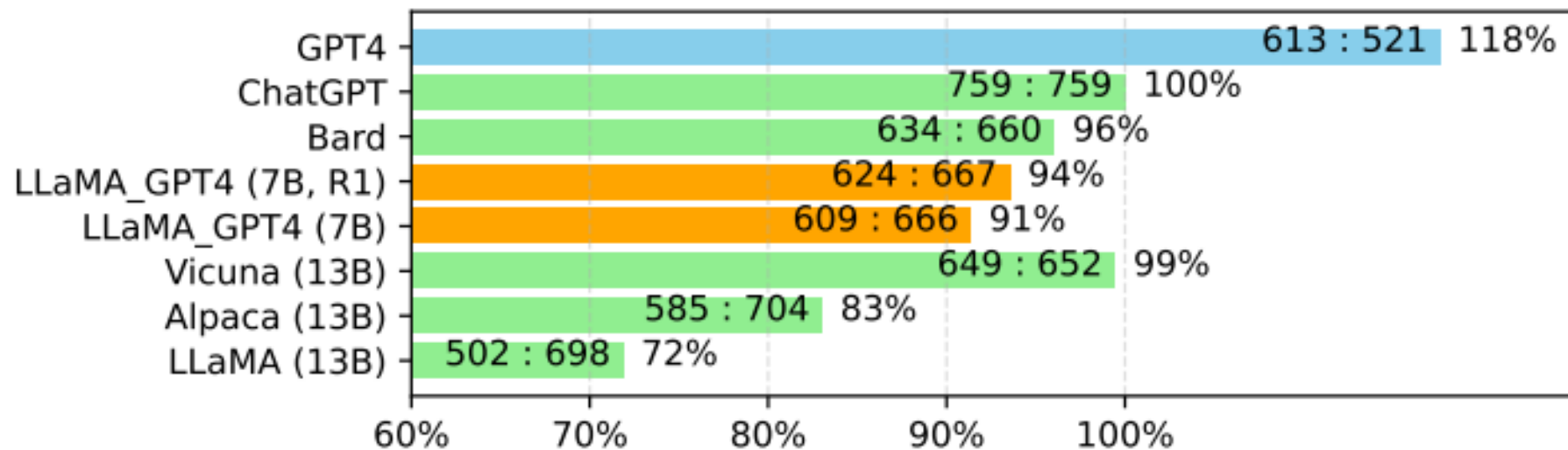
<https://arxiv.org/abs/2304.01373>

databricks-dolly-15k was authored by more than 5,000 Databricks employees during March and April of 2023.

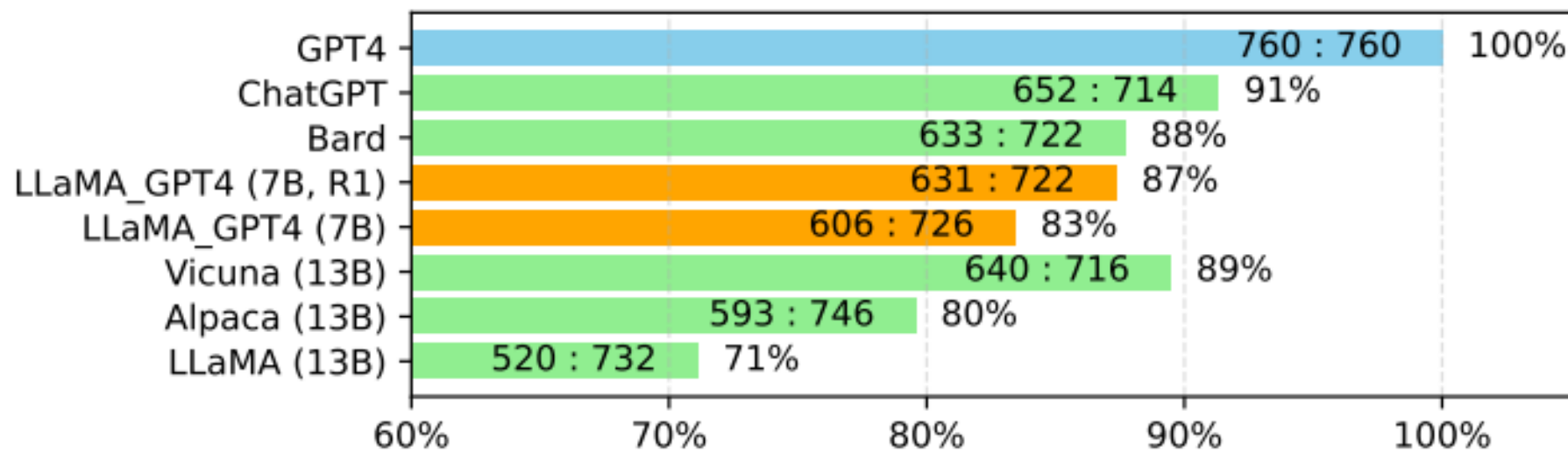
<https://www.databricks.com/blog/2023/04/12/dolly-first-open-commercially-viable-instruction-tuned-llm>

Model	Backbone	#Params	Open-source model	Open-source data	Claimed language	Post-training (instruction)	Post-training (conversation)	Released
ChatGPT	-	-	✗	✗	multi			11/30
Wenxin	-	-	✗	✗	zh			03/16
ChatGLM	GLM	6B	✓	✗	en, zh			03/16
Alpaca	LLaMA	7B	✓	✓	en	52K, en	✗	03/13
Dolly	GPT-J	6B	✓	✓	en	52K, en	✗	03/24
BELLE	BLOOMZ	7B	✓	✓	zh	1.5M, zh	✗	03/26
Guanaco	LLaMA	7B	✓	✓	en, zh, ja, de	534K, multi	✗	03/26
Chinese-LLaMA-Alpaca	LLaMA	7/13B	✓	✓	en, zh	2M/3M, en/zh	✗	03/28
LuoTuo	LLaMA	7B	✓	✓	zh	52K, zh	✗	03/31
Vicuna	LLaMA	7/13B	✓	✓	en	✗	70K, multi	03/13
Koala	LLaMA	13B	✓	✓	en	355K, en	117K, en	04/03
BAIZE	LLaMA	7/13/30B	✓	✓	en	52K, en	111.5K, en	04/04
Phoenix (Ours)	BLOOMZ	7B	✓	✓	multi	40+	40+	04/08
Latin Phoenix: Chimera (Ours)	LLaMA	7/13B	✓	✓	multi (Latin)	Latin	Latin	04/08

<https://github.com/FreedomIntelligence/LLMZoo>



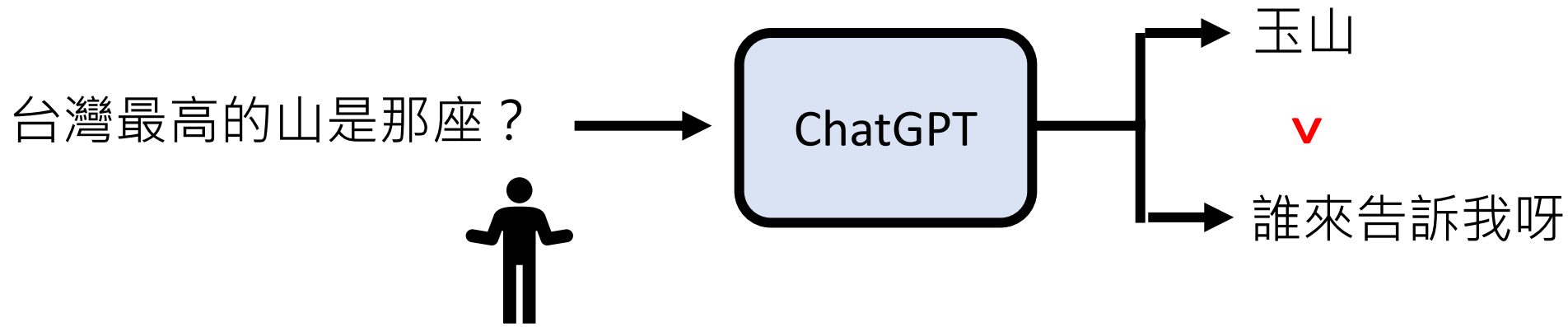
(c) All chatbots against ChatGPT



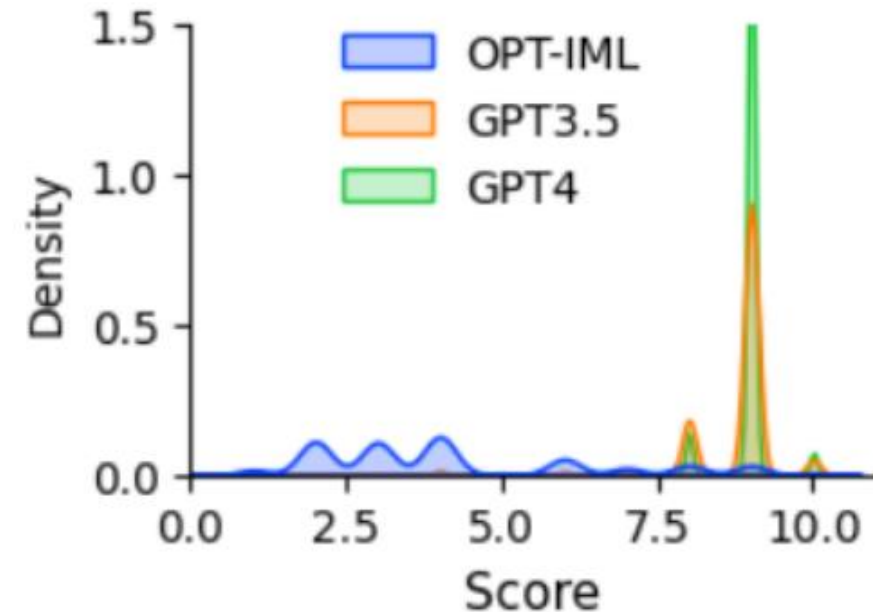
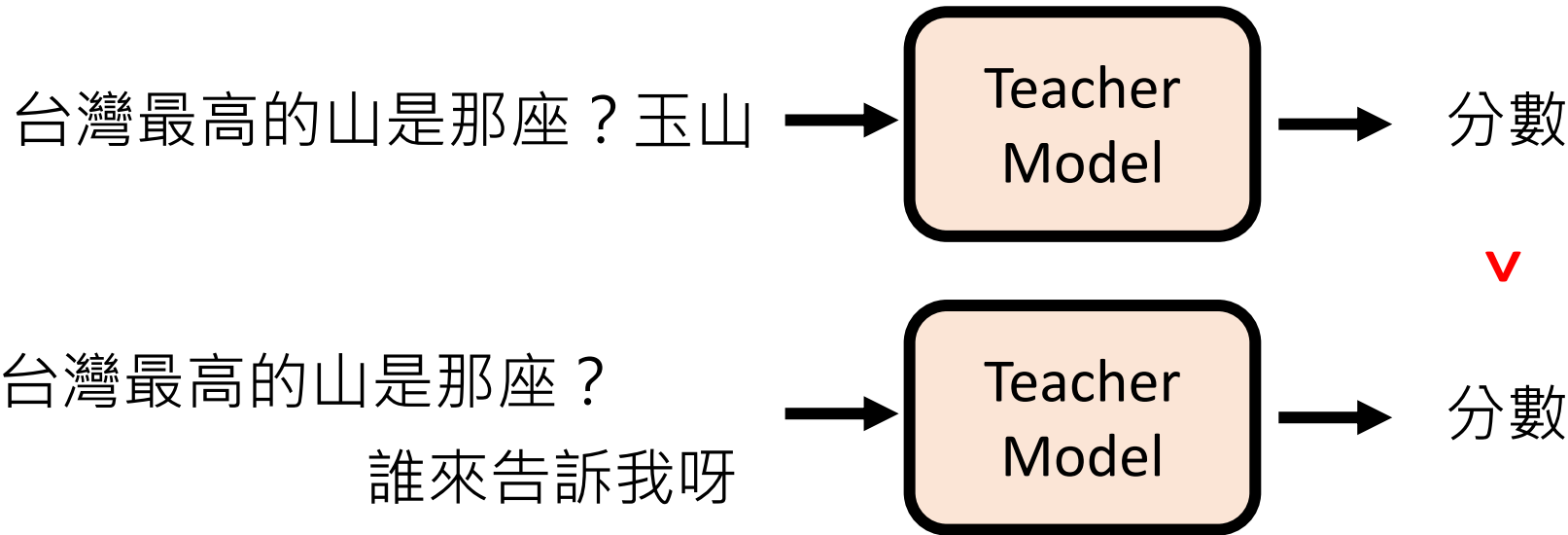
(d) All chatbots against GPT-4

<https://arxiv.org/abs/2304.03277>

No Reinforcement Learning?



GPT-4



Large Language Model can Self-improve

Self-consistency

Q: If there are 3 cars in the parking lot and 2 more cars arrive, how many cars are in the parking lot?

A: There are 3 cars in the parking lot already. 2 more arrive. Now there are $3 + 2 = 5$ cars. The answer is 5.

...

Q: Janet's ducks lay 16 eggs per day. She eats three for breakfast every morning and bakes muffins for her friends every day with four. She sells the remainder for \$2 per egg. How much does she make every day?

A:

Language model

Sample a diverse set of reasoning paths

She has $16 - 3 - 4 = 9$ eggs left. So she makes $\$2 * 9 = \18 per day.

The answer is \$18.

This means she she sells the remainder for $\$2 * (16 - 4 - 3) = \26 per day.

The answer is \$26.

She eats 3 for breakfast, so she has $16 - 3 = 13$ left. Then she bakes muffins, so she has $13 - 4 = 9$ eggs left. So she has $9 \text{ eggs} * \$2 = \18 .

The answer is \$18.

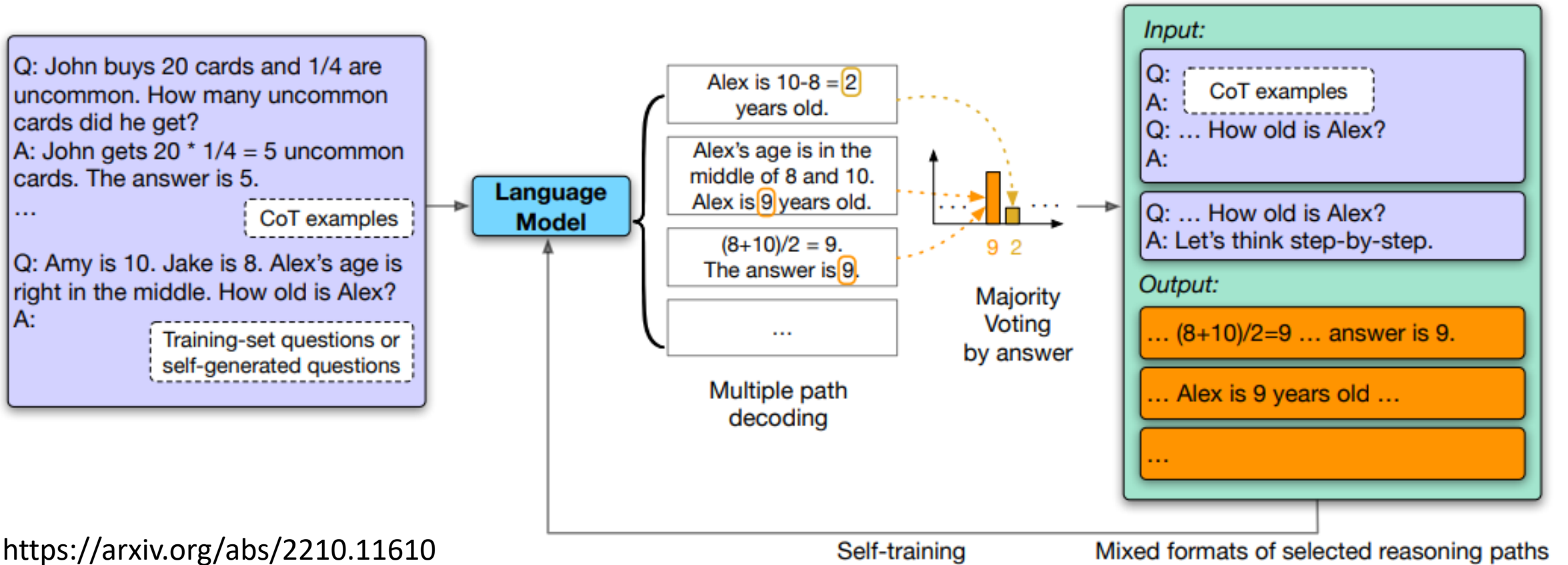
Marginalize out reasoning paths to aggregate final answers

The answer is \$18.

Ref: <https://arxiv.org/abs/2203.11171>

56.5% → 74.4% on GSM8K test set

Large Language Model can Self-improve



56.5% → 74.4% → 82.1% on GSM8K test set



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