



글로벌인재포럼 2024



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Question Strategies for Unlocking Smarter LLMs

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Human-AI Interaction

- “Natural language is the programming language of the brain” – <Snow Crash>



Human

1. Program for target task (logic, algorithm, procedure, ...)
2. Task input

```
for(i = 0; i < r; ++i) {  
  for(j = 0; j < c; ++j) {  
    cout << "Enter element b"...
```

Programming Language



Computer



Human

1. Instruction for target task (goal, definition, exemplar, ...)
2. Task input

Could you improve the following paragraph into a more technical and formal writing style? "In this ...

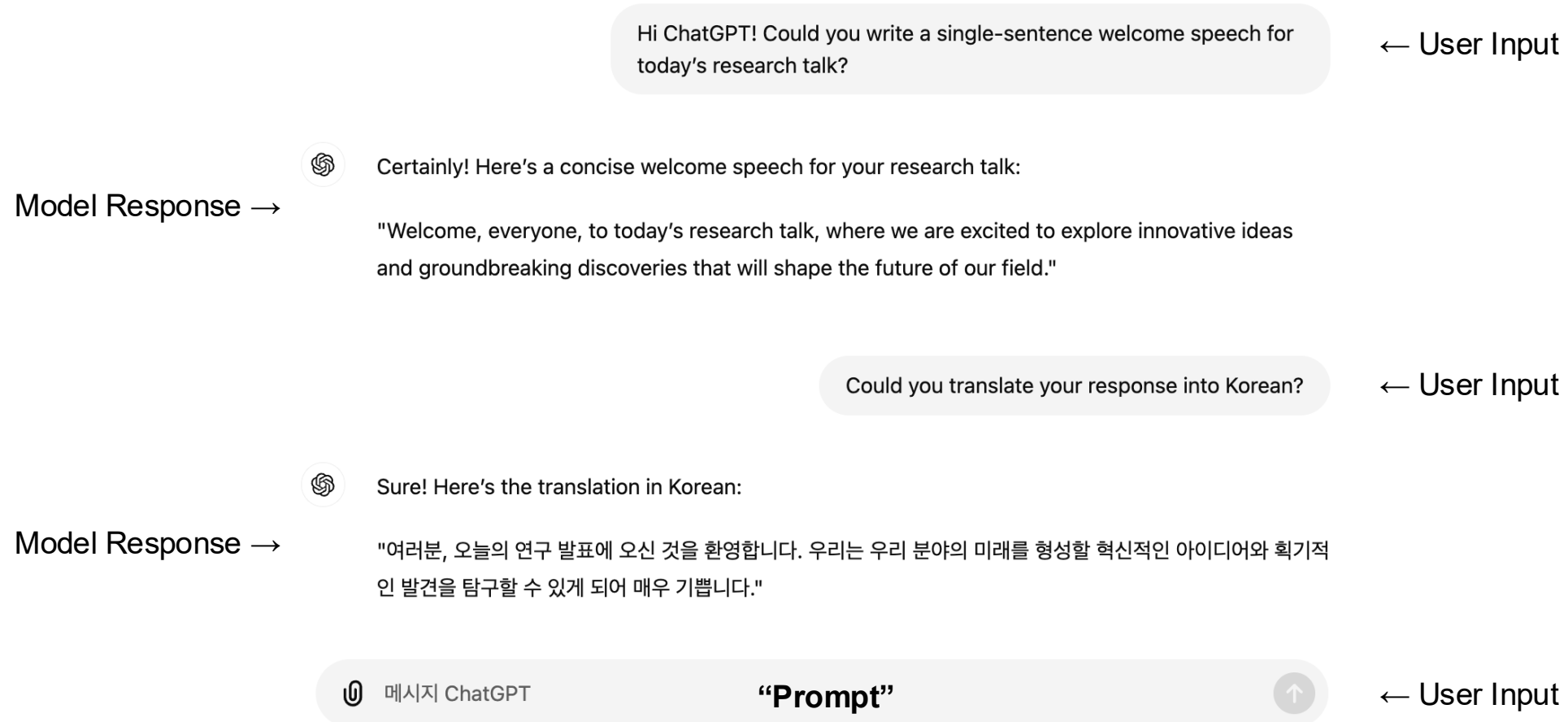
Natural Language



LLMs

Conversational User Interface

- Example of ChatGPT (GPT-3.5)

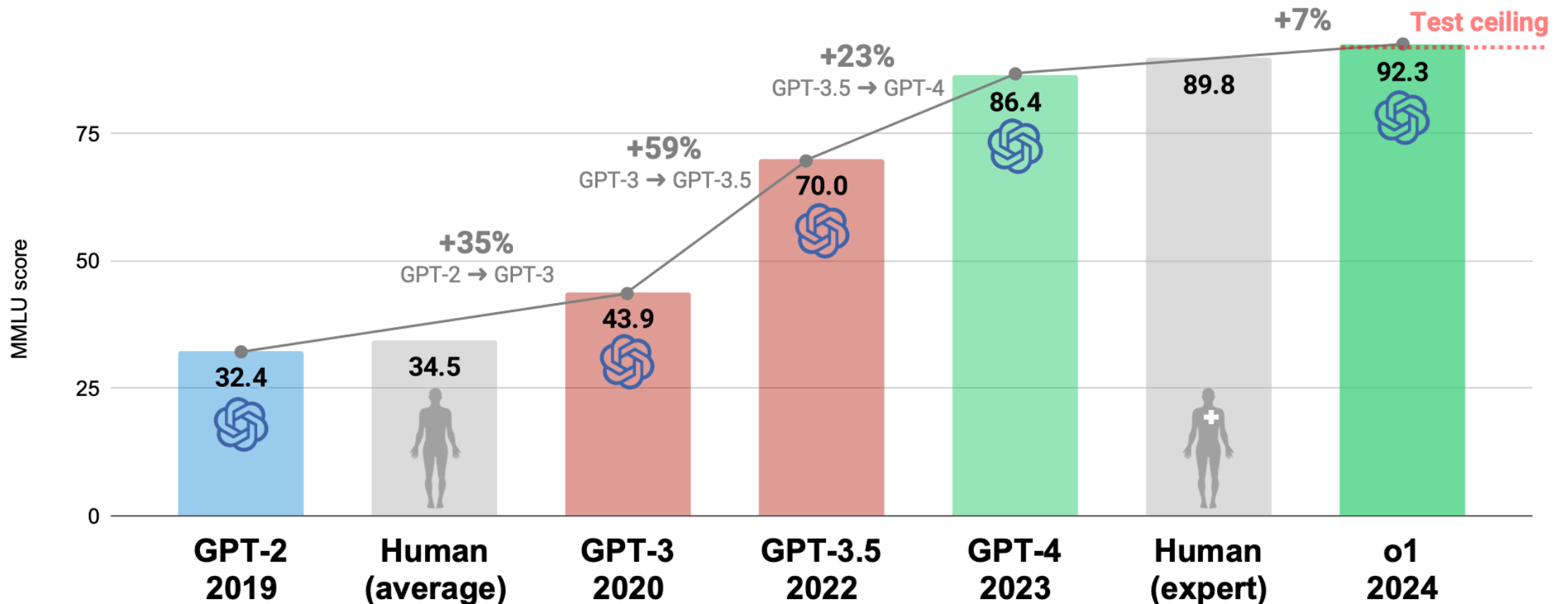


LLM Prompting

- **LLM prompting** refers to the practice of providing specific instructions, questions, or cues as input to an LLM in order to guide its generation of text
 - Prompt is a piece of text or an input given by a user to instruct the model and receive a desired response
 - The effectiveness and accuracy of LMs depend on well-crafted prompts that provide clarity, specificity, and sufficient context
- **Prompt Engineering** focuses on how to communicate with LM to steer its behavior for desired outcomes without updating the model weights
 - Prompt engineer is shaping up to be a promising AI-related career

LLMs are Smarter than We Think

- The o1 model outperforms human experts on the MMLU benchmark



MMLU (Massive Multitask Language Understanding) benchmark features 57 tasks including mathematics, US history, computer science, law, and more. % increases rounded. <https://liferchitect.ai/o1/> Alan D. Thompson. 2024.

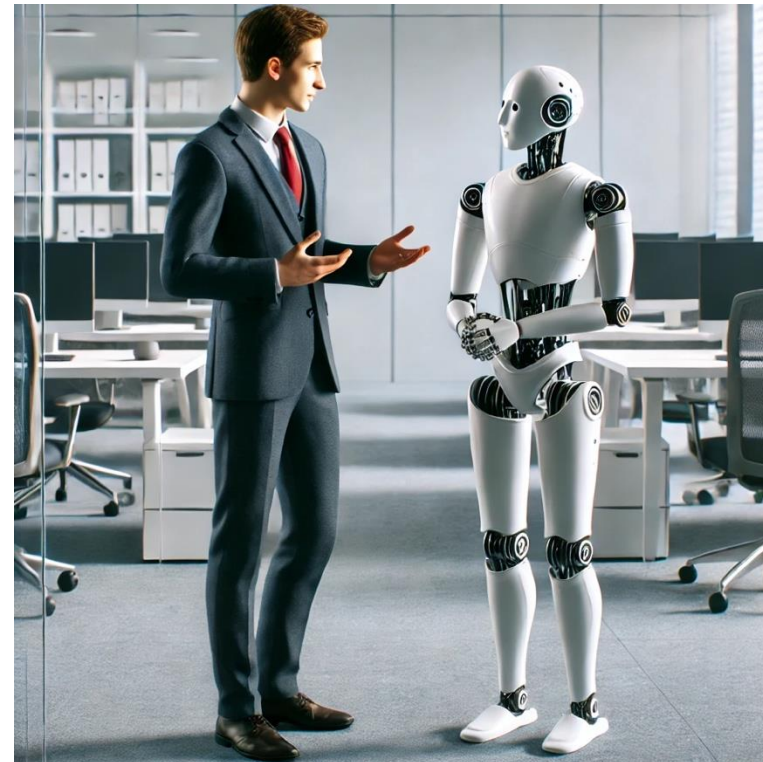
From Answering AI to Questioning AI

- However, the results have not yet reached humans' expectations
 - Why? Unclear instruction, Insufficient context, ...

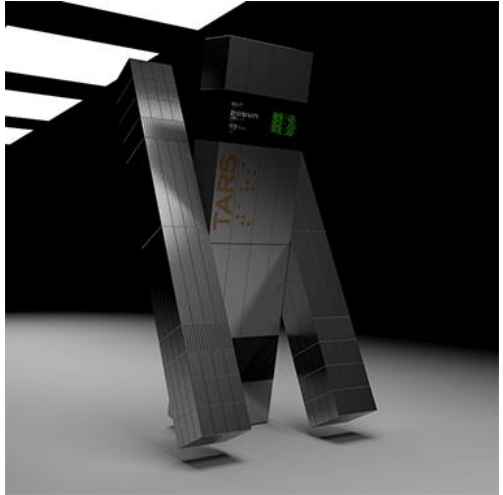
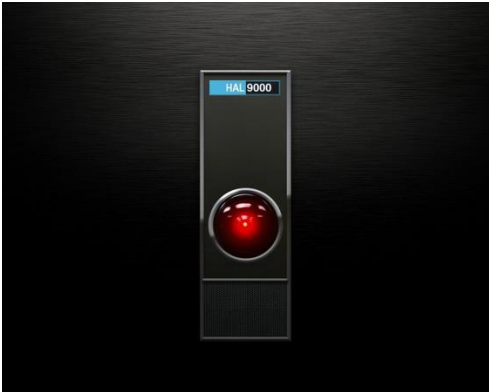


From Answering AI to Questioning AI

- Future AI will clarify users' requirements and contexts, leading to more effective results
 - How? Active interactions, Asking questions, Eliciting intents, ...



Towards Human-like Conversational AI



Thank you