

Lesson 02: Large Language Models

Overview:

In this activity, you'll test your knowledge of AI models by matching descriptions to the correct model names. This exercise will enhance your understanding of different AI models, improve your recognition and differentiation skills, and solidify your foundational knowledge of artificial intelligence, which is vital for both theoretical understanding and practical application in the field.

Instructions:

1. Read the description of the AI model carefully
2. Choose the correct name of the model from the list of options and write it
3. Repeat steps 1 and 2 for each description
4. Check your answers with the key answers provided at the end of the activity

Tasks:

Task 1: Read the description provided below:

- A. A family of large language models (LLMs) trained on a blend of text and code from before Q4 2021. The following models are in this family: code-davinci-002, text-davinci-002, and embed-davinci-002.
- B. A next-generation AI assistant based on Anthropic's research into training helpful, honest, and harmless AI systems. It is accessible through a chat interface and API, and it can handle a wide variety of conversational and text-processing tasks while maintaining high reliability and predictability.
- C. A large multimodal model (accepting text or image inputs and outputting text) can solve complex problems with more accuracy than any previous model, thanks to its broader general knowledge and advanced reasoning capabilities. It excels at tasks like advanced reasoning, translation, and code generation.
- D. A large language model (LLM) that helps enterprises build powerful, secure applications that search, understand meaning, and converse in text. It offers two versions: a powerful model that can handle sophisticated dialog, creative content generation, and detailed instructions, and a faster and less expensive model that can handle casual dialog, text analysis and summarization, and document Q&A.

- E. A large language model (LLM) that builds on Google's legacy of breakthrough research in machine learning and responsible AI. It improves upon its predecessor by unifying three distinct research advancements in large language models: compute-optimal scaling, an improved dataset mixture, and model architecture improvements.

Task 2: Choose the correct name of the model from the list of options and write it:

1. GPT-4 (OpenAI)
2. Cohere
3. Claude v1
4. PaLM 2
5. LLaMA

Discussion Questions (Optional)

If time permits, discuss the below question:

1. Discuss why the other options are incorrect in a few sentences.

Answer Key

Description:

A. A family of large language models (LLMs) trained on a blend of text and code from before Q4 2021. The following models are in this family: code-davinci-002, text-davinci-002, and embed-davinci-002.

Correct Answer: GPT-4 (OpenAI)

Explanation: This description matches the characteristics of OpenAI's GPT-4, as it mentions a family of large language models (LLMs) with specific versions like code-davinci-002, text-davinci-002, and embed-davinci-002.

Description:

B. A next-generation AI assistant based on Anthropic's research into training helpful, honest, and harmless AI systems. It is accessible through a chat interface and API, and it can handle a wide variety of conversational and text-processing tasks while maintaining high reliability and predictability.

Correct Answer: Cohere

Explanation: This description aligns with Cohere, known for its next-generation AI assistant, which focuses on training helpful, honest, and harmless AI systems. It emphasizes a wide range of conversational and text-processing tasks accessible through the chat interface and API.

Description:

C. A large multimodal model (accepting text or image inputs and outputting text) can solve difficult problems with greater accuracy than any of the previous models, thanks to its broader general knowledge and advanced reasoning capabilities. It excels at tasks like advanced reasoning, translation, and code generation.

Correct Answer: LLaMA

Explanation: This description matches LLaMA, as it refers to a large multimodal model that accepts both text and image inputs, excelling at tasks like advanced reasoning, translation, and code generation.

Description:

D. A large language model (LLM) that helps enterprises build powerful, secure applications that search, understand meaning, and converse in text. It offers two versions: a powerful model that can handle sophisticated dialog, creative content generation, and detailed instructions, and a faster and less expensive model that can handle casual dialog, text analysis and summarization, and document Q&A.

Correct Answer: PaLM 2

Explanation: This description fits PaLM 2, as it is a large language model designed to assist enterprises in building powerful, secure applications. The two versions mentioned correspond to the versatility offered by PaLM 2.

Description:

E. A large language model (LLM) that builds on Google's legacy of breakthrough research in machine learning and responsible AI. It improves upon its predecessor by unifying three distinct research advancements in large language models: the use of compute-optimal scaling, an improved dataset mixture, and model architecture improvements.

Correct Answer: Claude v1

Explanation: This description corresponds to Claude v1, a large language model building on Google's legacy with improvements in compute-optimal scaling, dataset mixture, and model architecture.