

How does Chat GPT work?

How can *we* use Chat GPT?

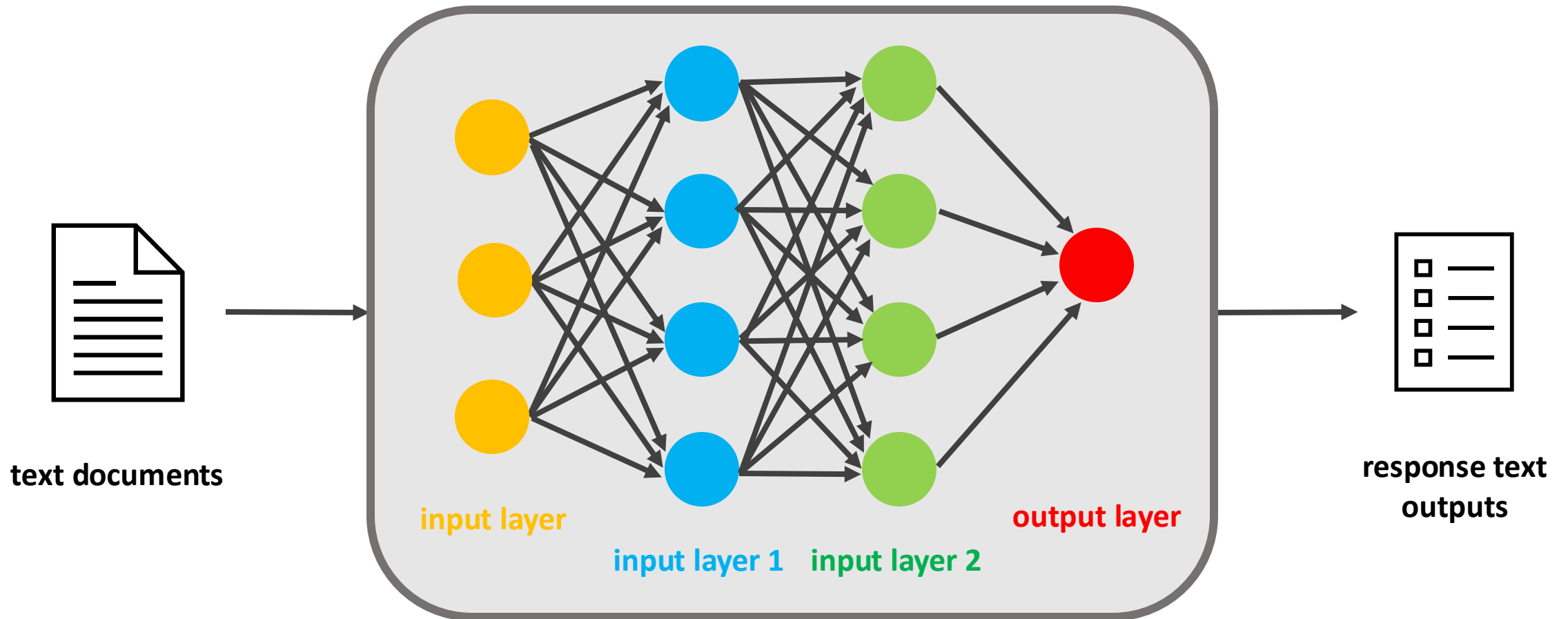


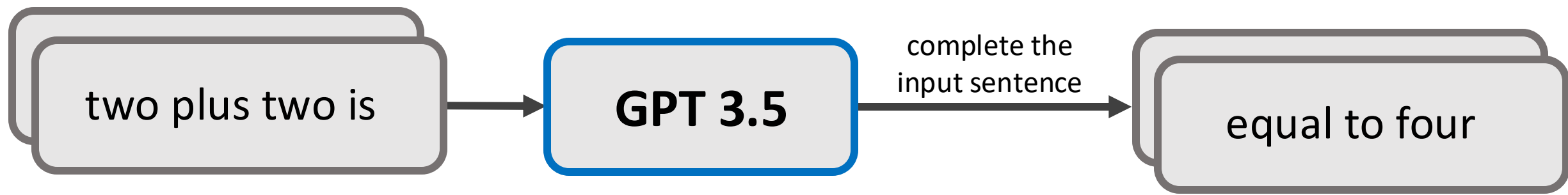
Gabrielle Gershon

Learning Objectives

- **Understand** the **framework** of an LLM like **ChatGPT** and to be able to effectively explain it to a peer.
- Develop comfort in **using ChatGPT** within **medical contexts**, demonstrated by generating relevant responses to medical queries in simulated scenarios.
- Compile a list of at least five potential **use cases** and associated **constraints** for implementing **ChatGPT** in upcoming **medical scenarios**.

Large Language Model (LLM)





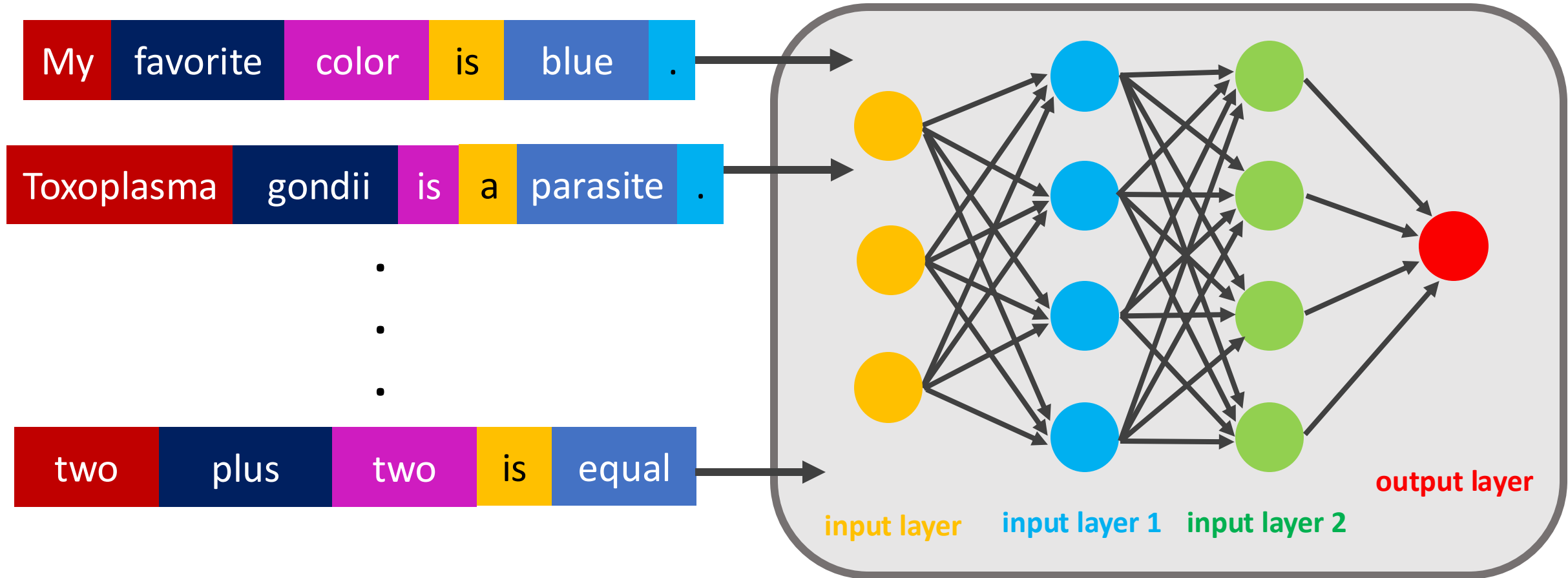
Text:

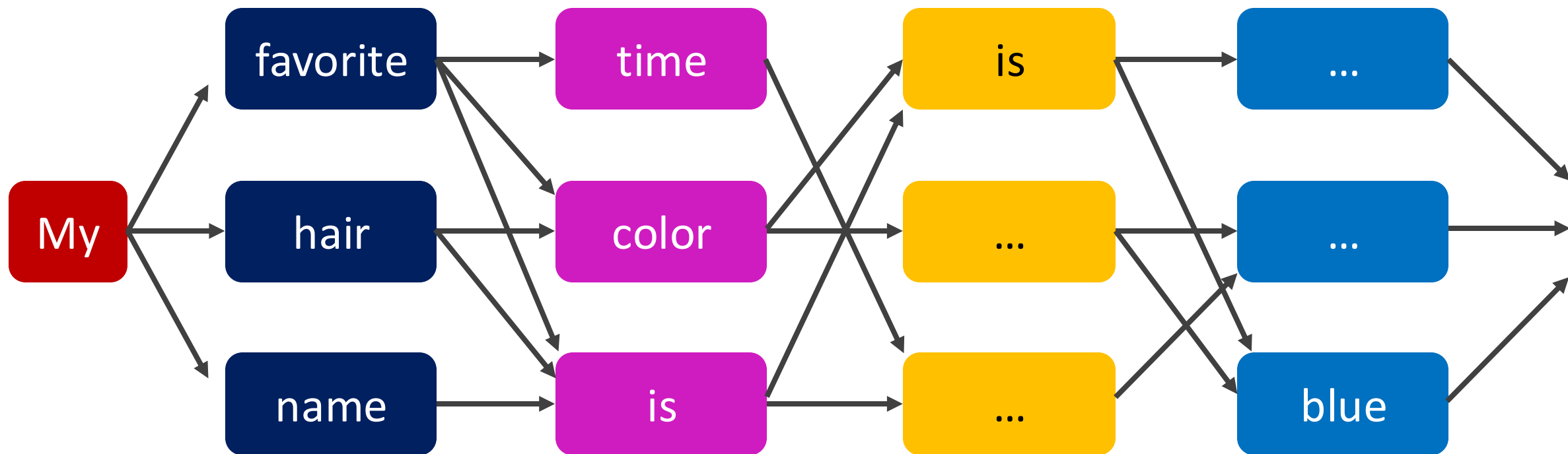
My favorite color is blue .

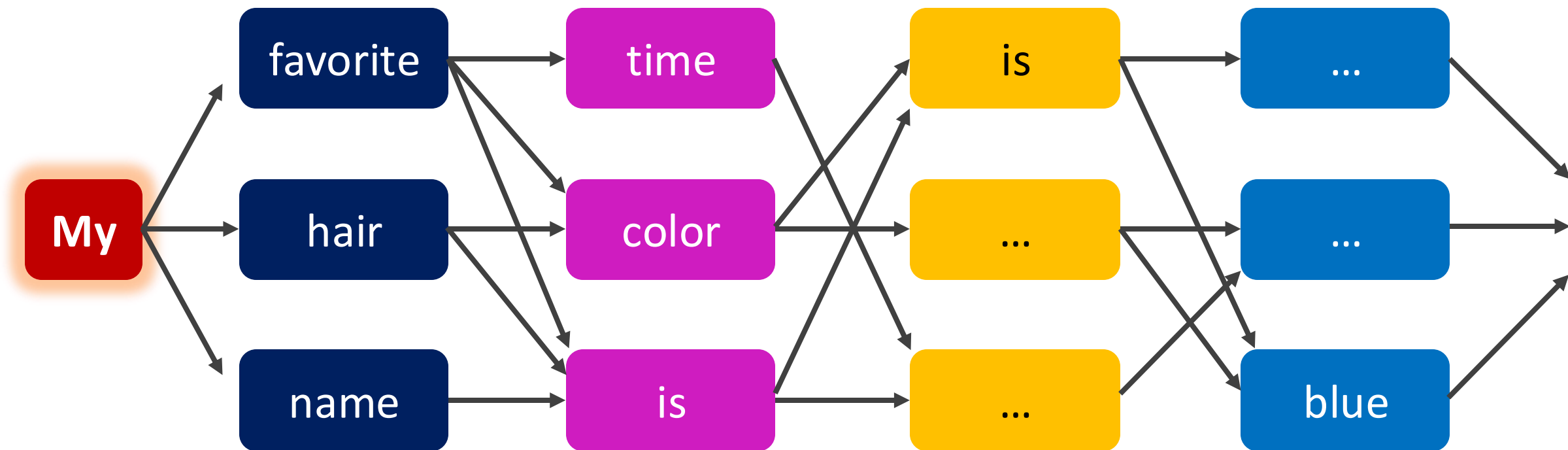


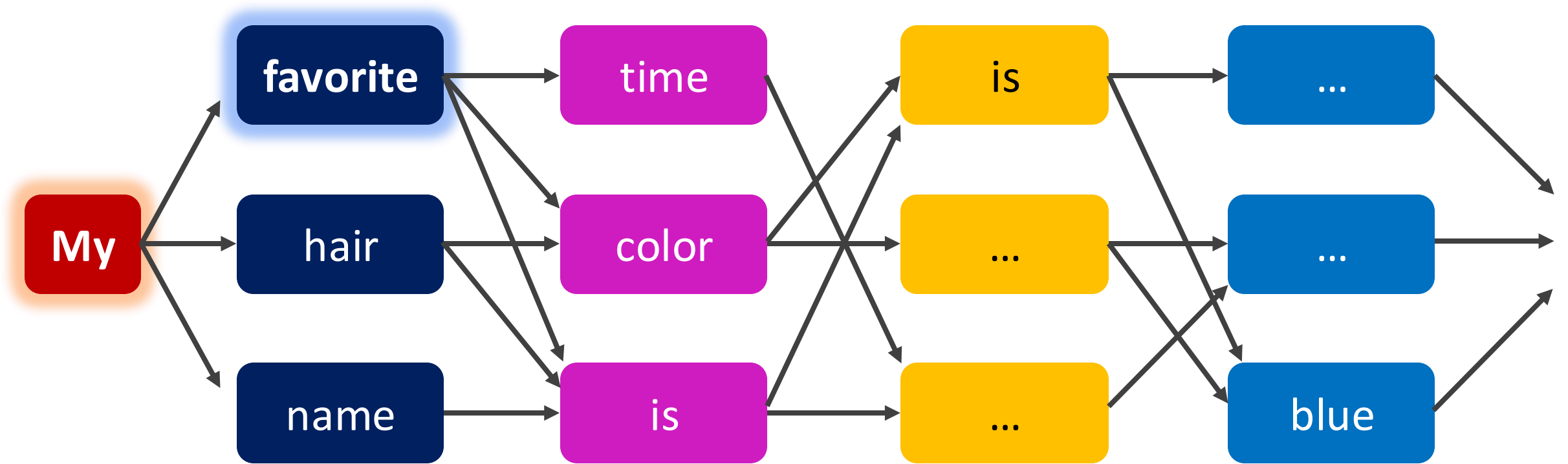
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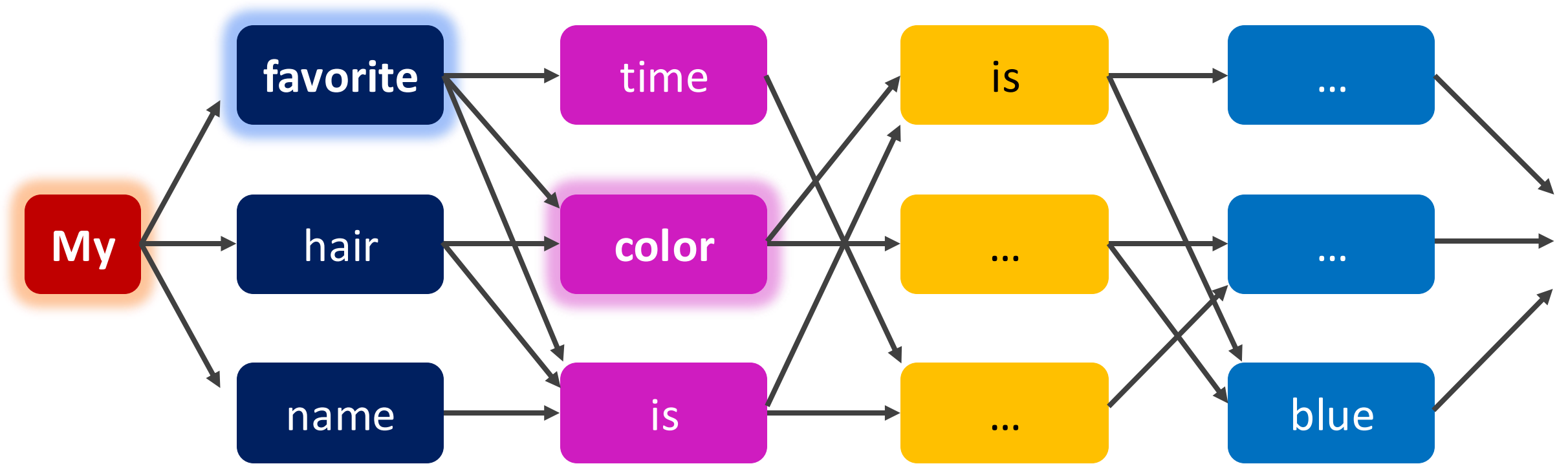
500-Billion Tokens

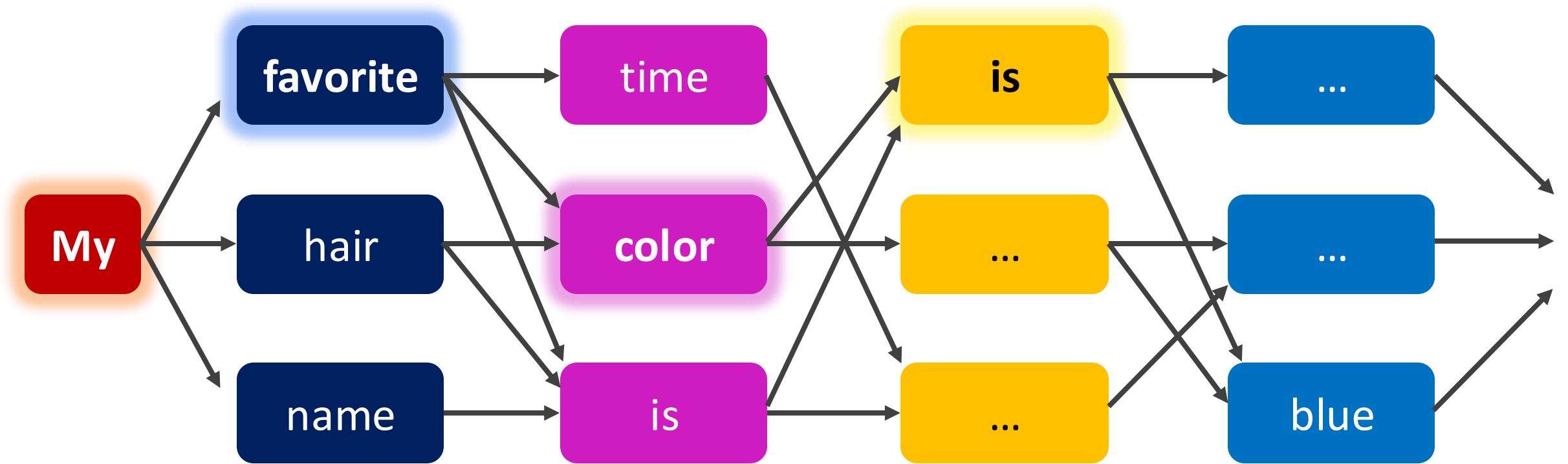


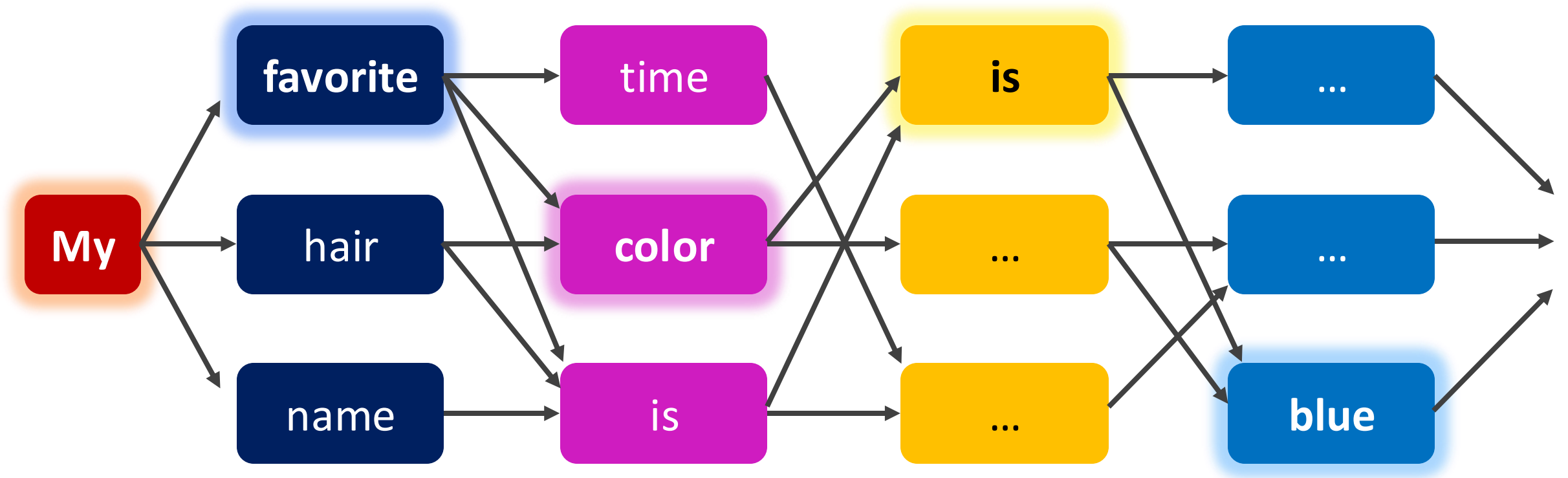




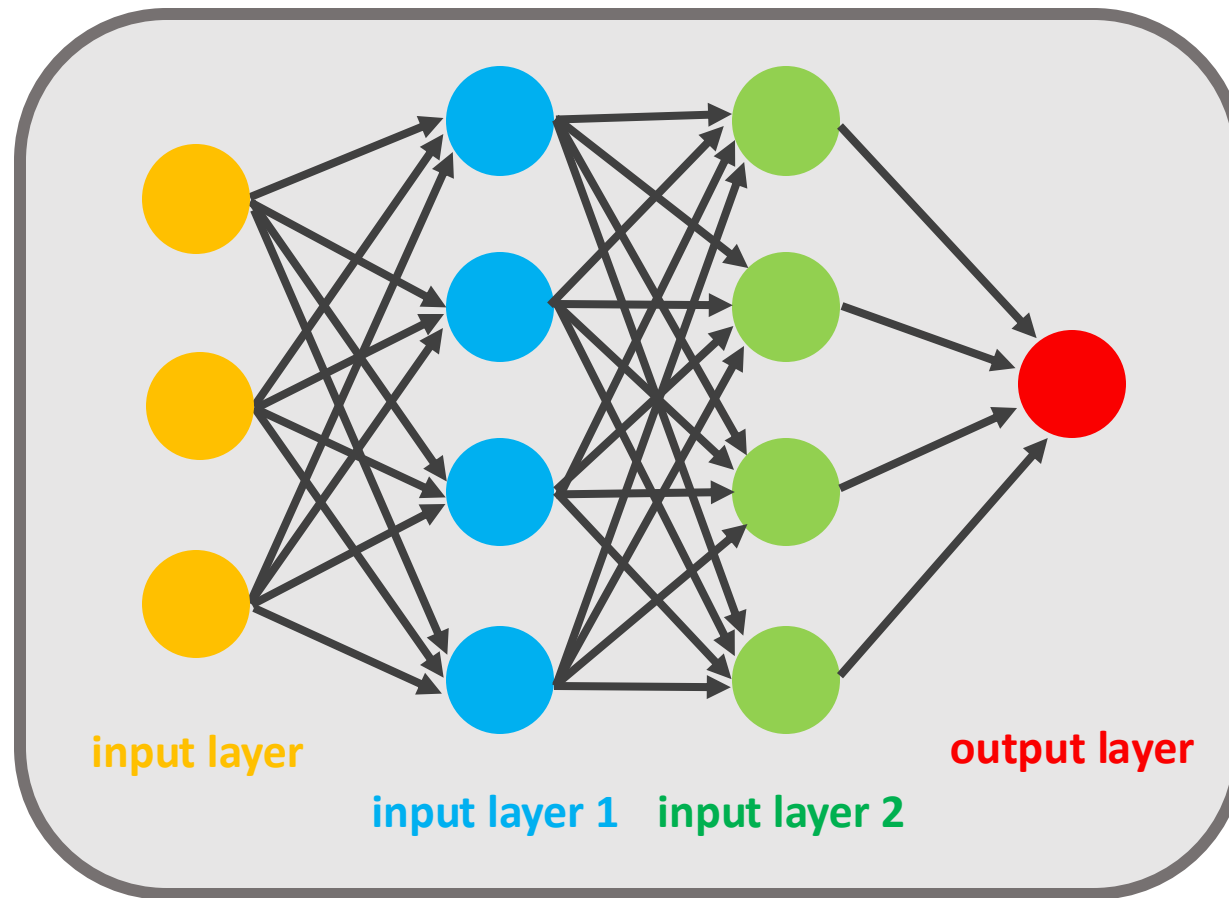






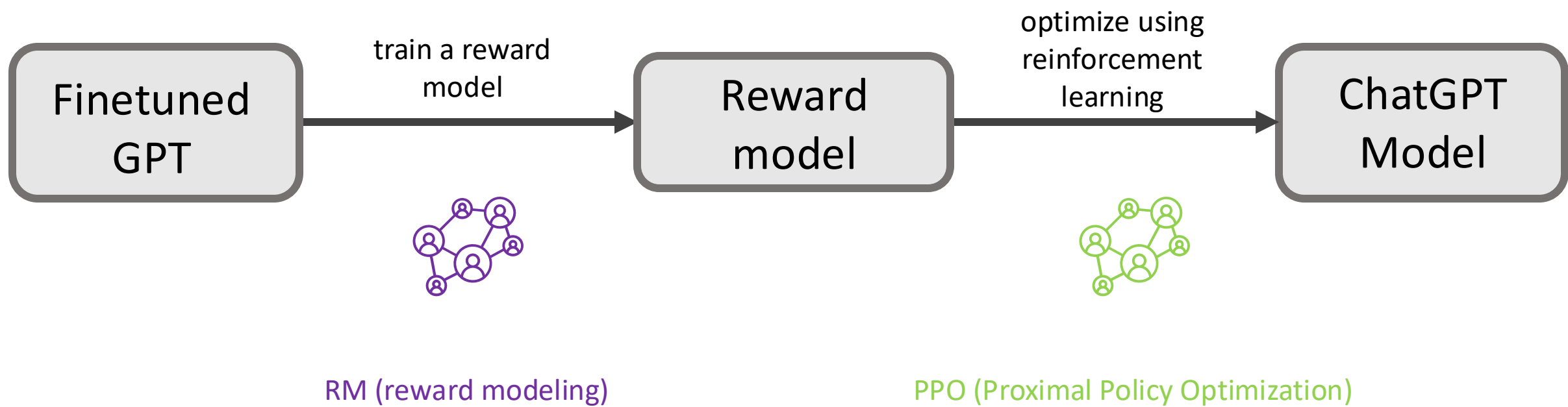


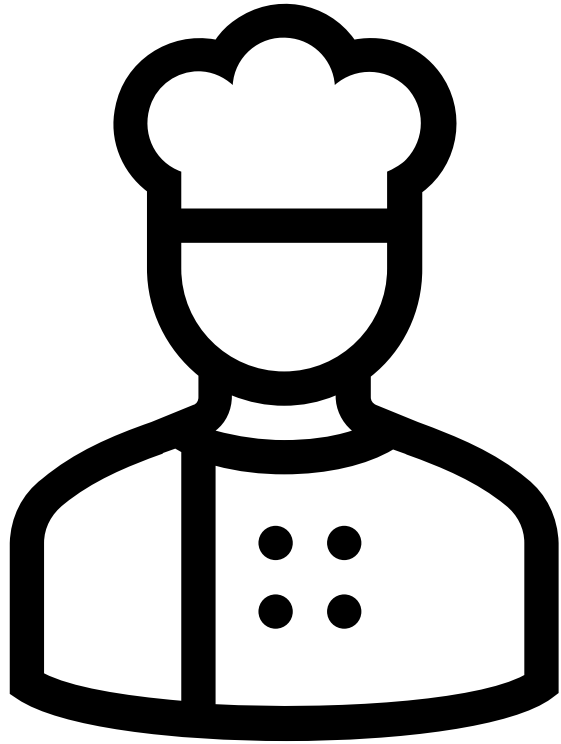
**175 Billion
Parameters**

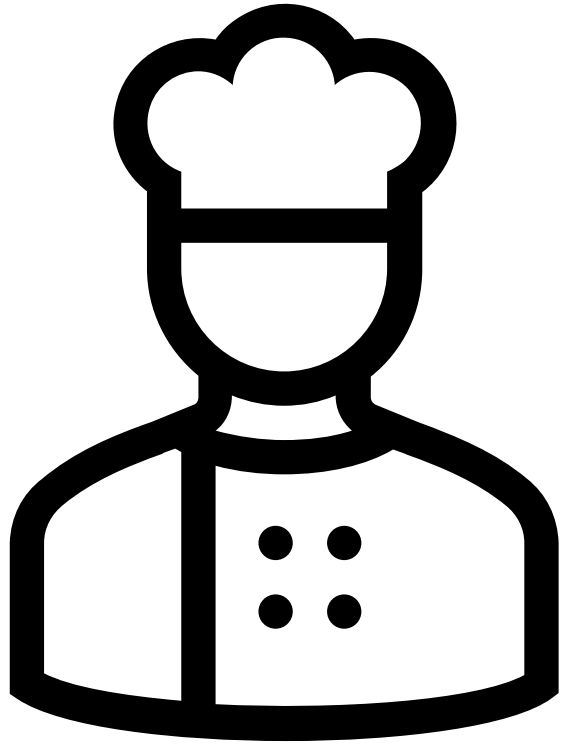


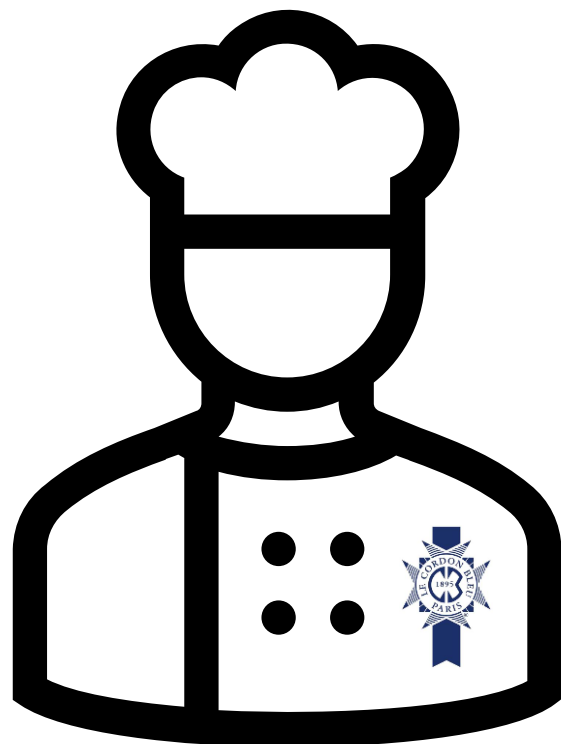
96 Layers

Questions?

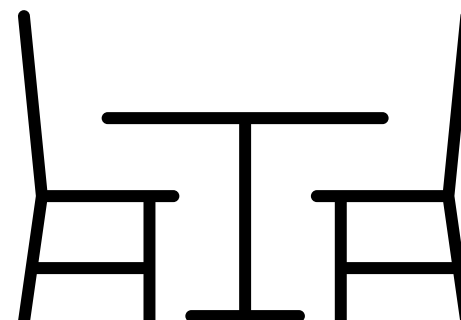


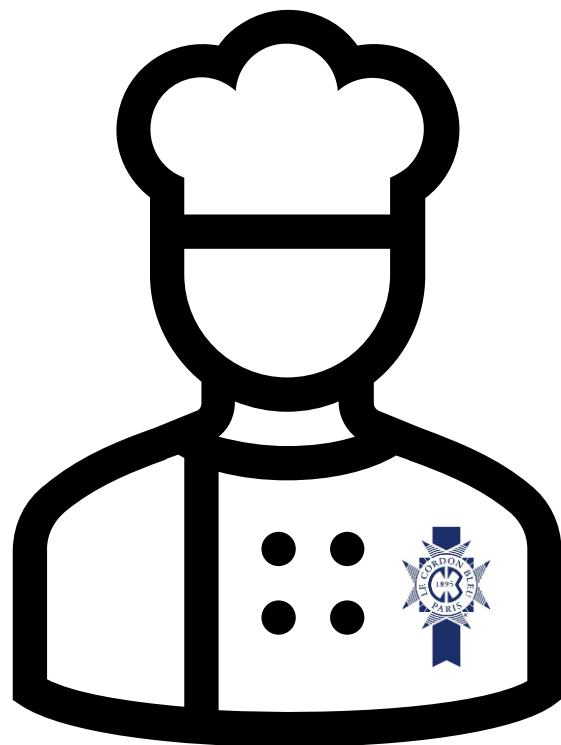






Chef Bleu's

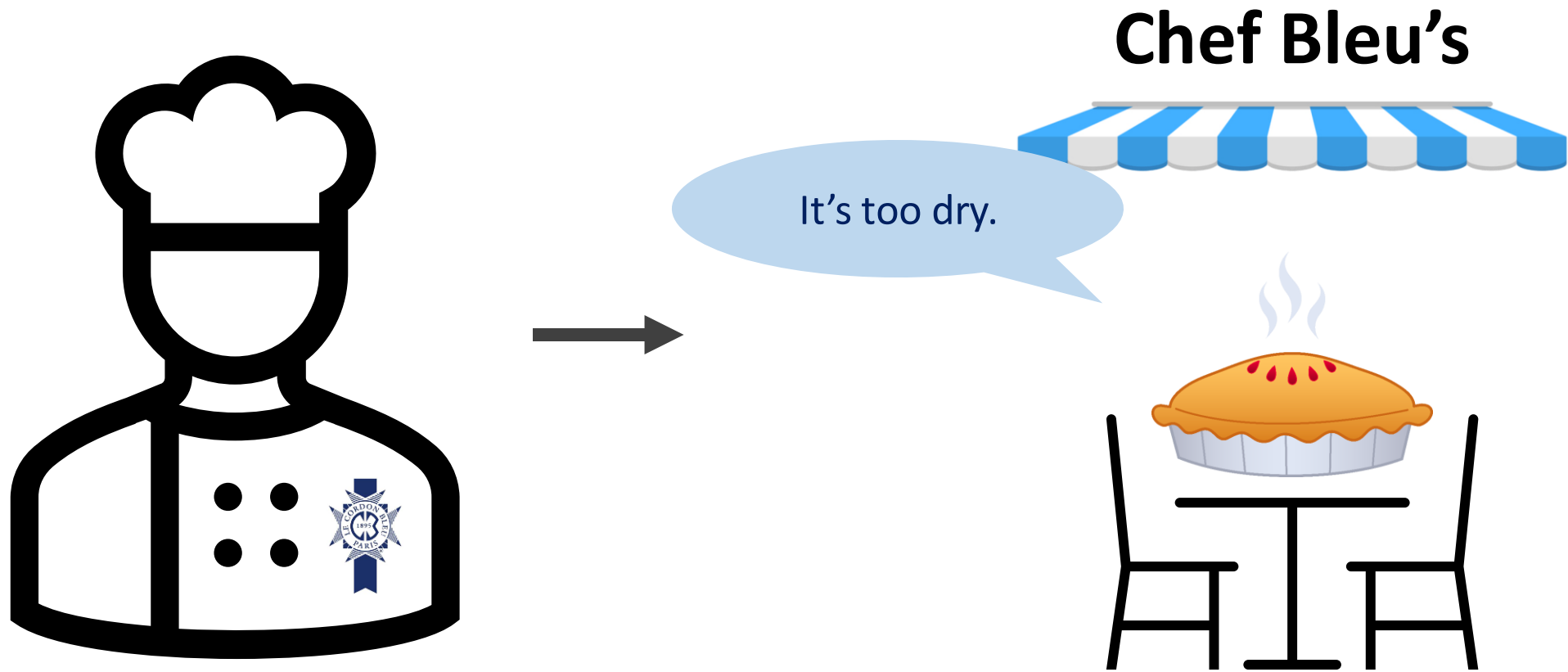




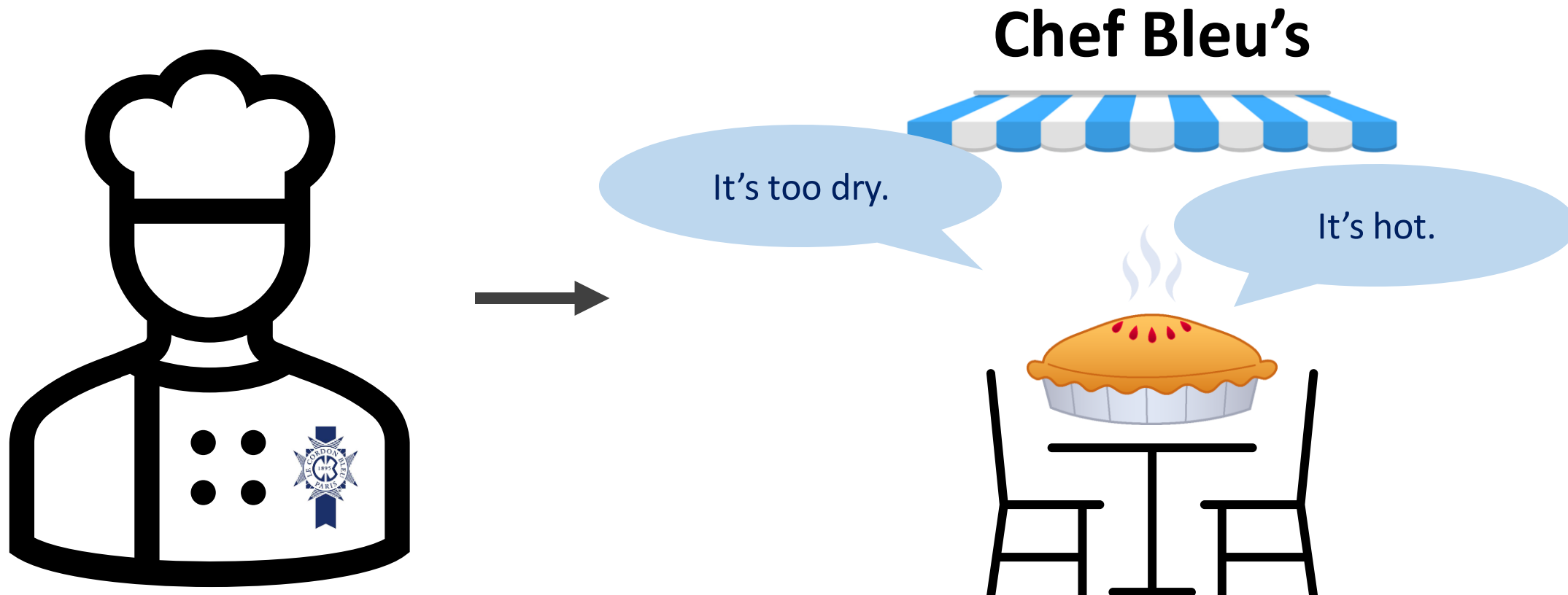
Chef Bleu's



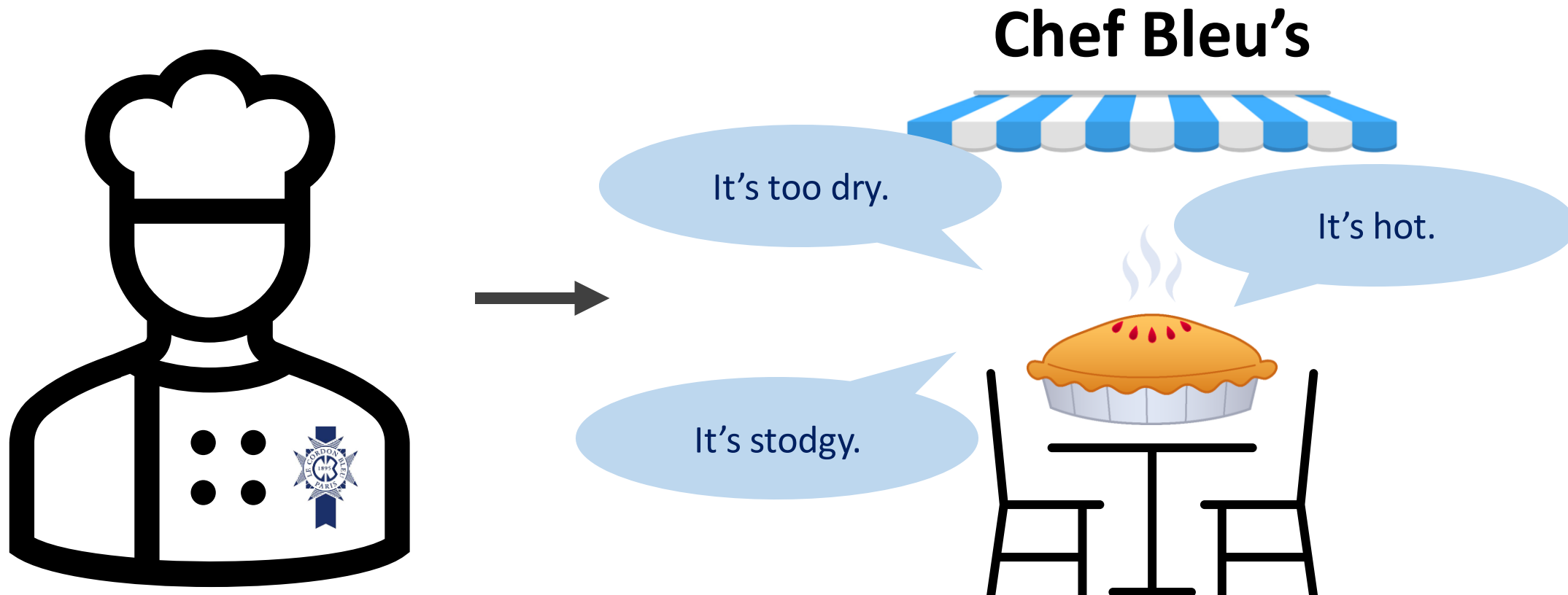
RLHF (Reinforcement Learning from Human Feedback)



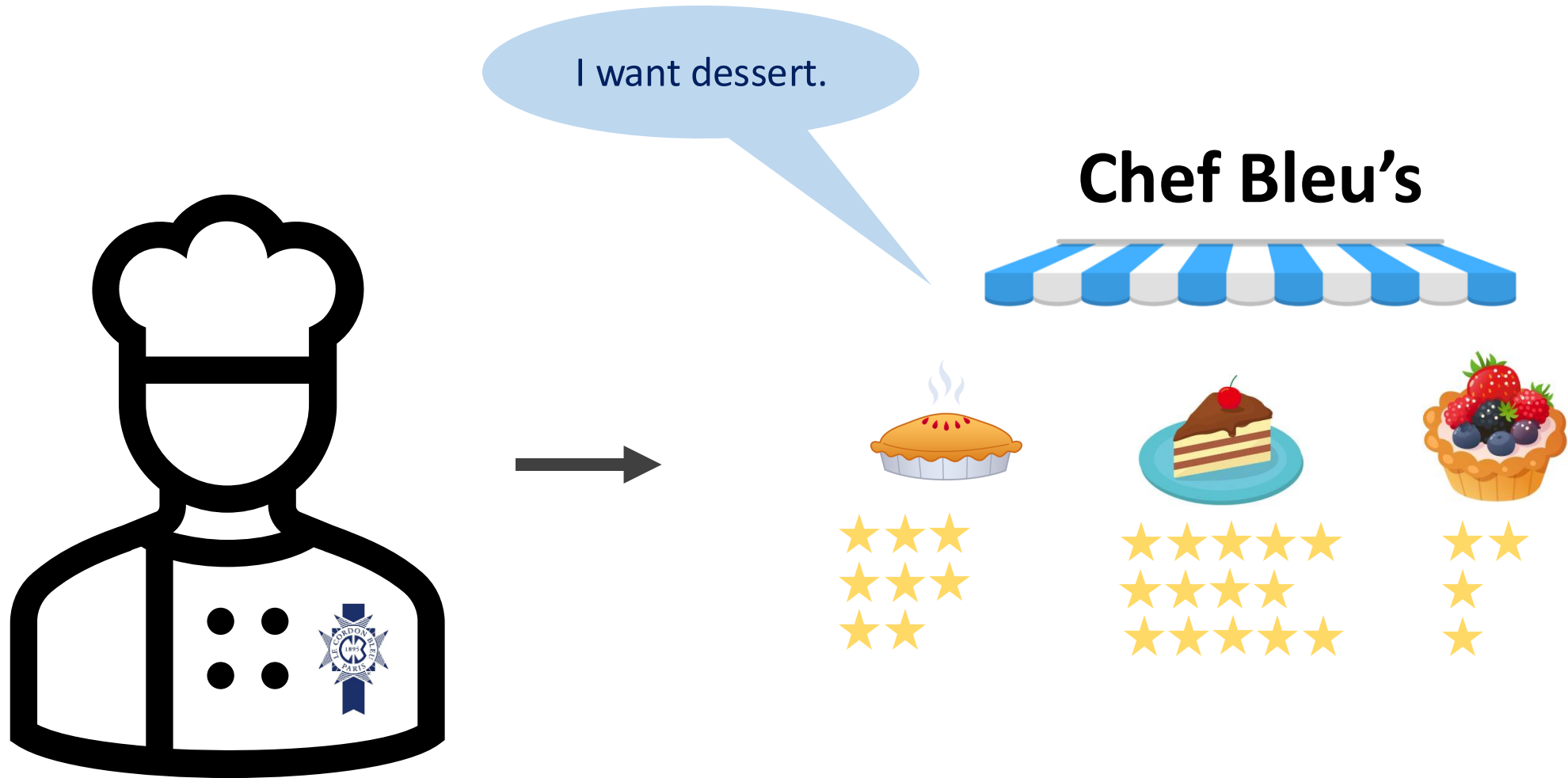
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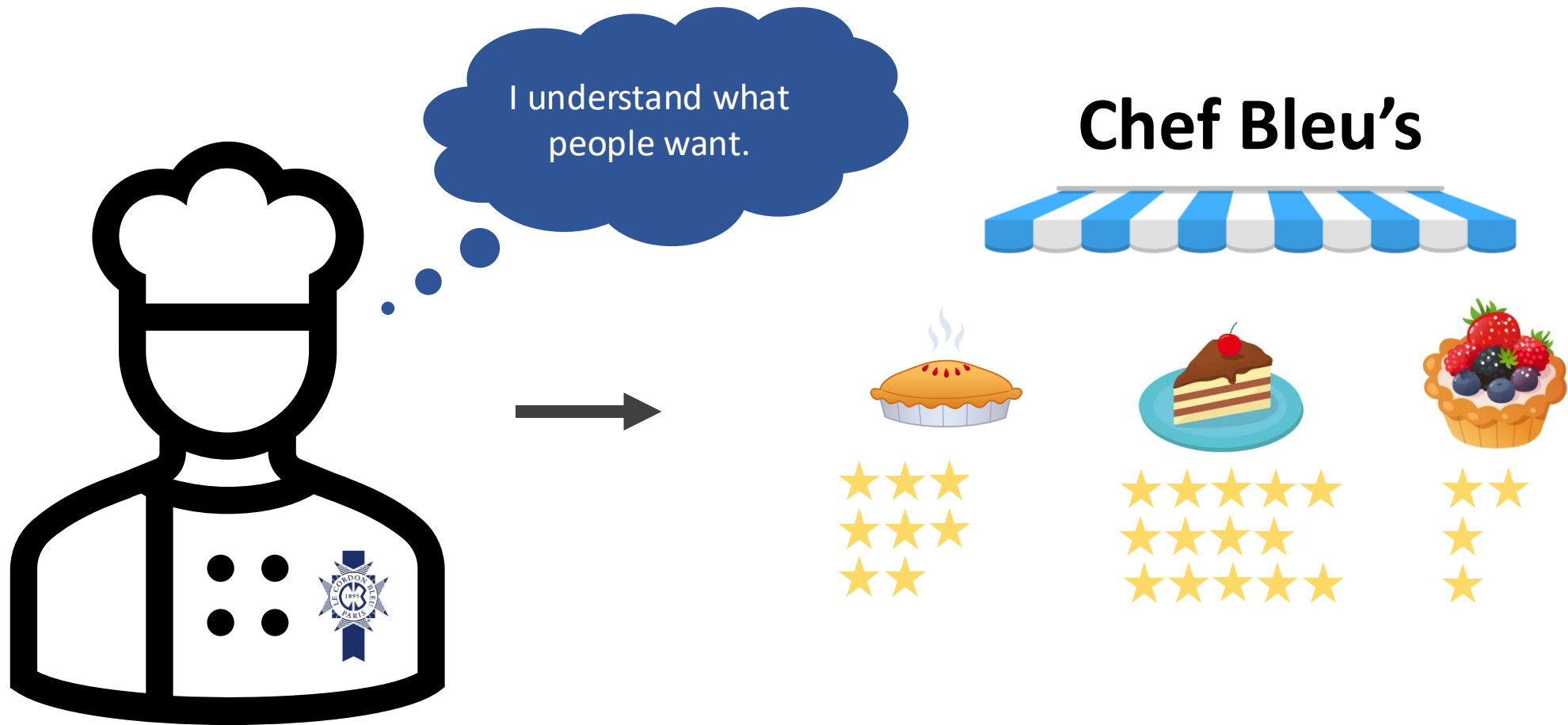
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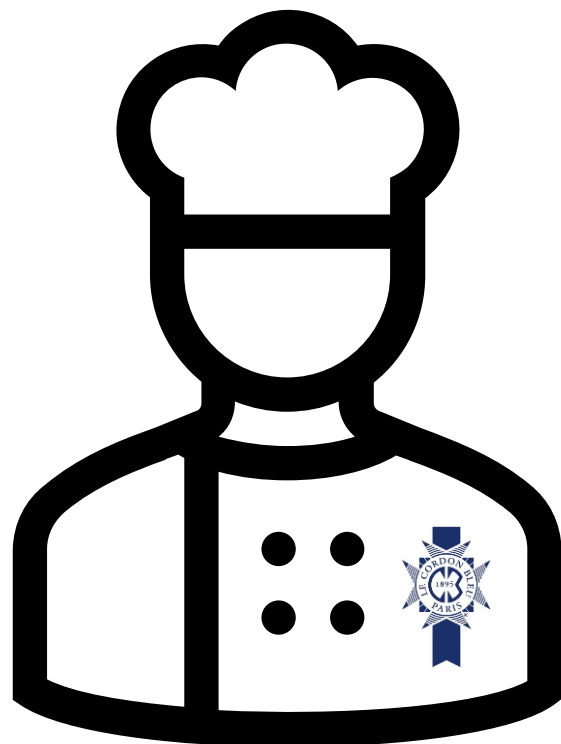
RLHF (Reinforcement Learning from Human Feedback)



RM (Reward Modeling)



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PPO (Proximal Policy Optimization)

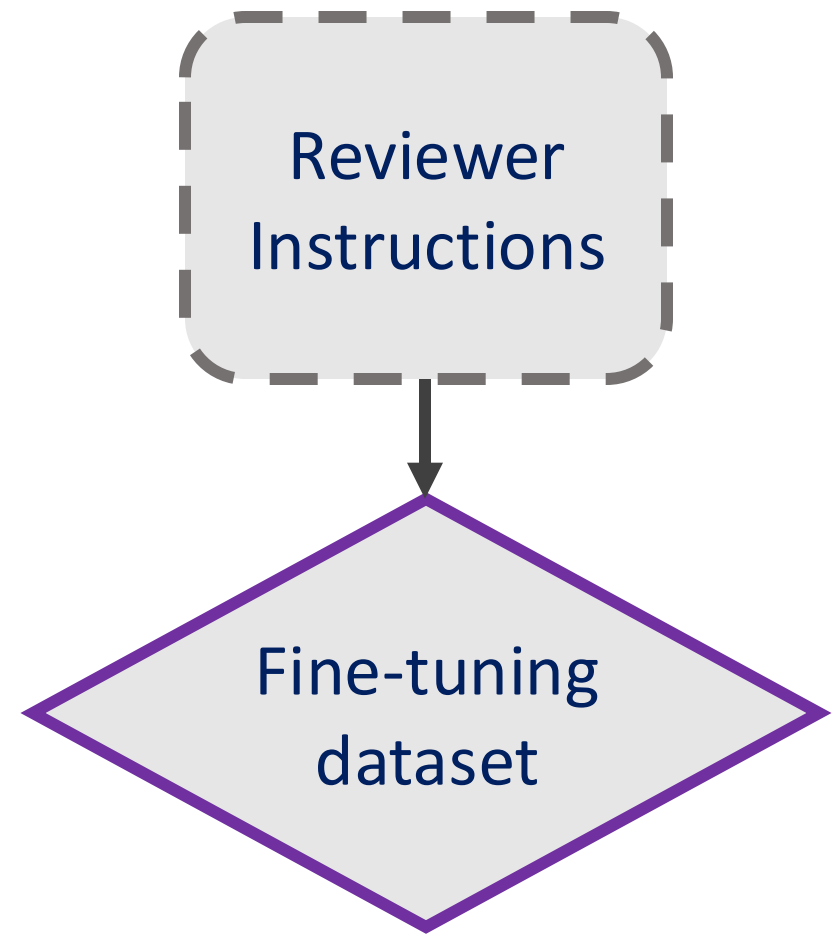
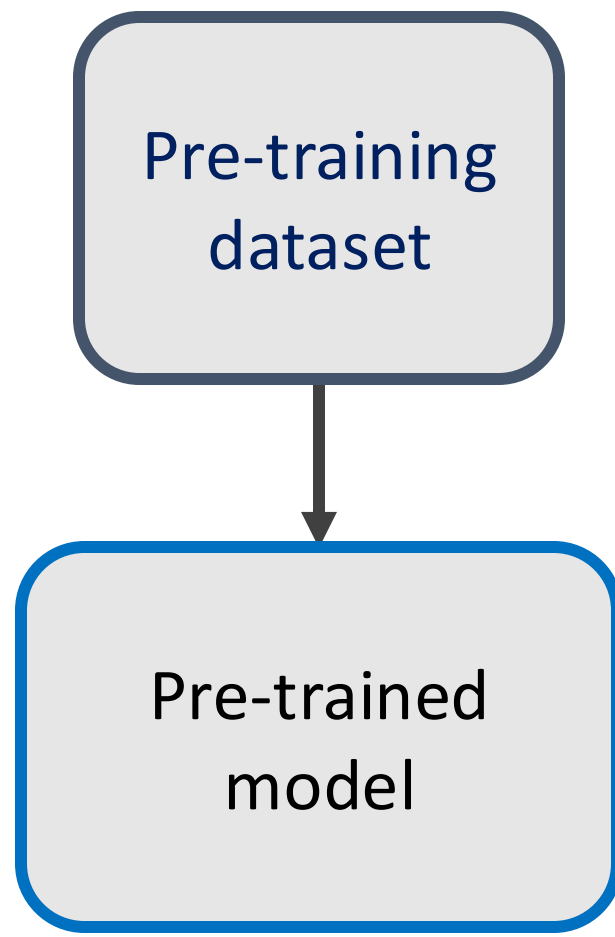
Pre-training
dataset

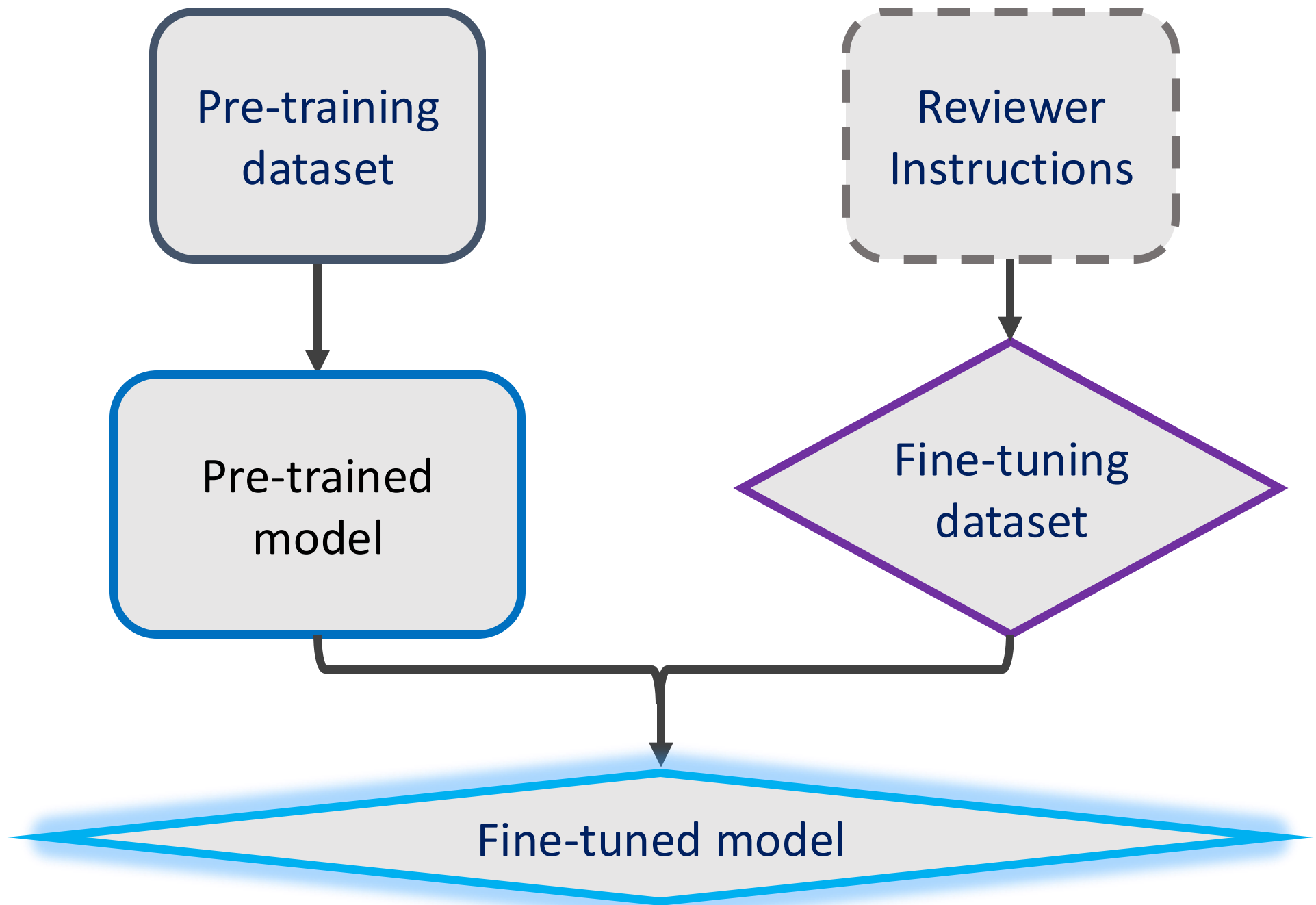


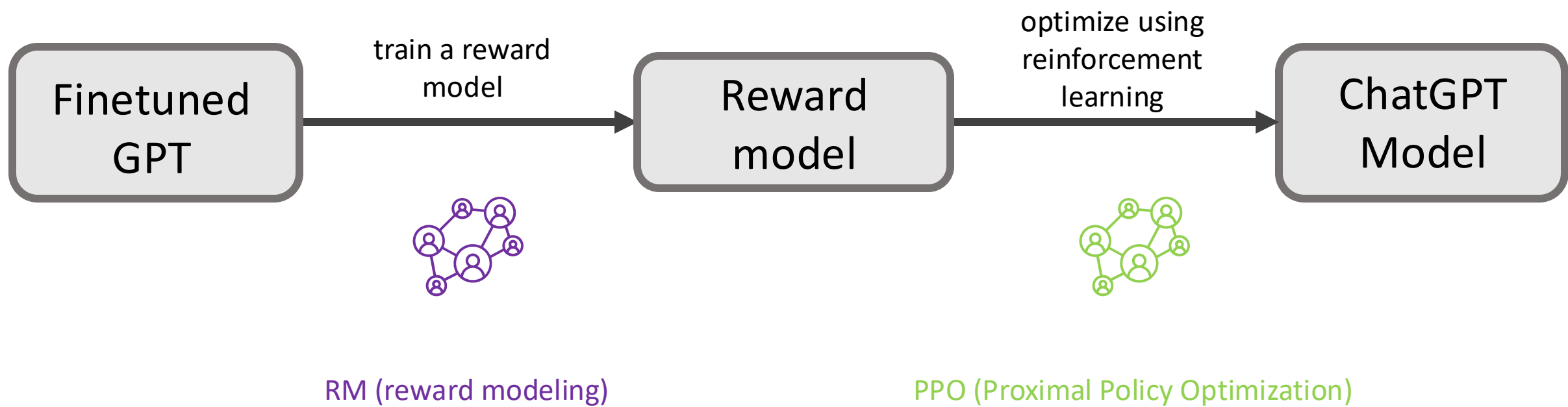
```
graph TD; A[Pre-training dataset] --> B[Pre-trained model];
```

A flowchart illustrating the process of pre-training. It consists of two rectangular boxes with rounded corners. The top box is light gray with a dark blue border and contains the text "Pre-training dataset". A dark gray arrow points downwards from the bottom center of this box to the top center of the bottom box. The bottom box is also light gray but has a thick blue border and contains the text "Pre-trained model".

Pre-trained
model







Questions?

A boy saw 17 doctors over 3 years for chronic pain. ChatGPT found the diagnosis

Alex experienced pain that stopped him from playing with other children but doctors had no answers to why. His frustrated mom asked ChatGPT for help.

by Meghan Holohan | TODAY

Sept 10, 2023

How can I use ChatGPT in
medical school?

- Appendix IV: On The Use of Artificial Intelligence for Assignments
- Using an artificial intelligence program to generate any content for any assignment (including, but not limited to examinations, papers, homework, and creative work) constitutes plagiarism and is a violation of the Honor Code unless **students acknowledge in the assignment the extent to which an artificial intelligence program contributed to their work** and outside resources are permitted for the assignment. The use of an artificial intelligence program for an academic assignment when outside resources are not permitted or when the use of artificial intelligence programs is prohibited may also constitute seeking unauthorized assistance or violate other provisions of the Honor Code. Students should reach out to their professors to inquire about the appropriate use of artificial intelligence programs if students are unclear about the expectations

Navigate to chat.openai.com

Microsoft Copilot AI chat service for Emory community launches

April 22, 2024



men

- What is it?
- What symptoms may one present with?
- How do you acquire it?
- How common is it?

Tips

- 1 - Be Specific
- 2 - State Your Intent
- 3 - Use Correct Spelling and Grammar
- 4 - Direct the Output Format
- 5 - Ask Follow-Up Questions
- 6 - Experiment with Different Phrasings
- 7 - Prompt for Fact-Checking

Our First PBL ...

Background: Sarah Jean Jones is an **18-month old** female who is new to your practice. She is coming in for a routine checkup accompanied by her parents who also report some **respiratory complaints** for the child.

Chief Complaint: checkup and “**frequent cough**”

Use Chat GPT as a study tool

- Create a study guide for *insert illness*
- How does *insert medication* work?
- Explain to me in simple terms what *insert diagnosis* is and what the risk factors are.
- Quiz me. Ask me a board style question about *input subject/system* and provide me with 5 options. Do not disclose the answer until I reply with my answer.

Questions?

Applications of AI in medicine

◆ WSJ NEWS EXCLUSIVE

At Startup That Says Its AI Writes Medical Records, Humans Do a Lot of the Work

DeepScribe has a team of people to correct terminology, remove erroneous prescriptions and add billing codes

Google AI tool can help patients identify skin conditions

🕒 18 May 2021

When Doctors Use a Chatbot to Improve Their Bedside Manner

Despite the drawbacks of turning to artificial intelligence in medicine, some physicians find that ChatGPT improves their ability to communicate empathetically with patients.

HEALTH
AI tech aims to detect breast cancer by mimicking radiologists' eye movements: 'A critical friend'
Researchers hope AI model can scan mammograms faster, as expert calls out 'limitations and concerns'
By Melissa Rudy · Fox News

[Global Edition](#) [Artificial Intelligence](#)

AI NLP models extract SDOH data from clinical notes

The Regenstrief Institute and Indiana University show how a natural language processing system can "read" and identify keywords or phrases that indicate housing or financial needs while it performs accurately.