

Training Your Own Chatbot

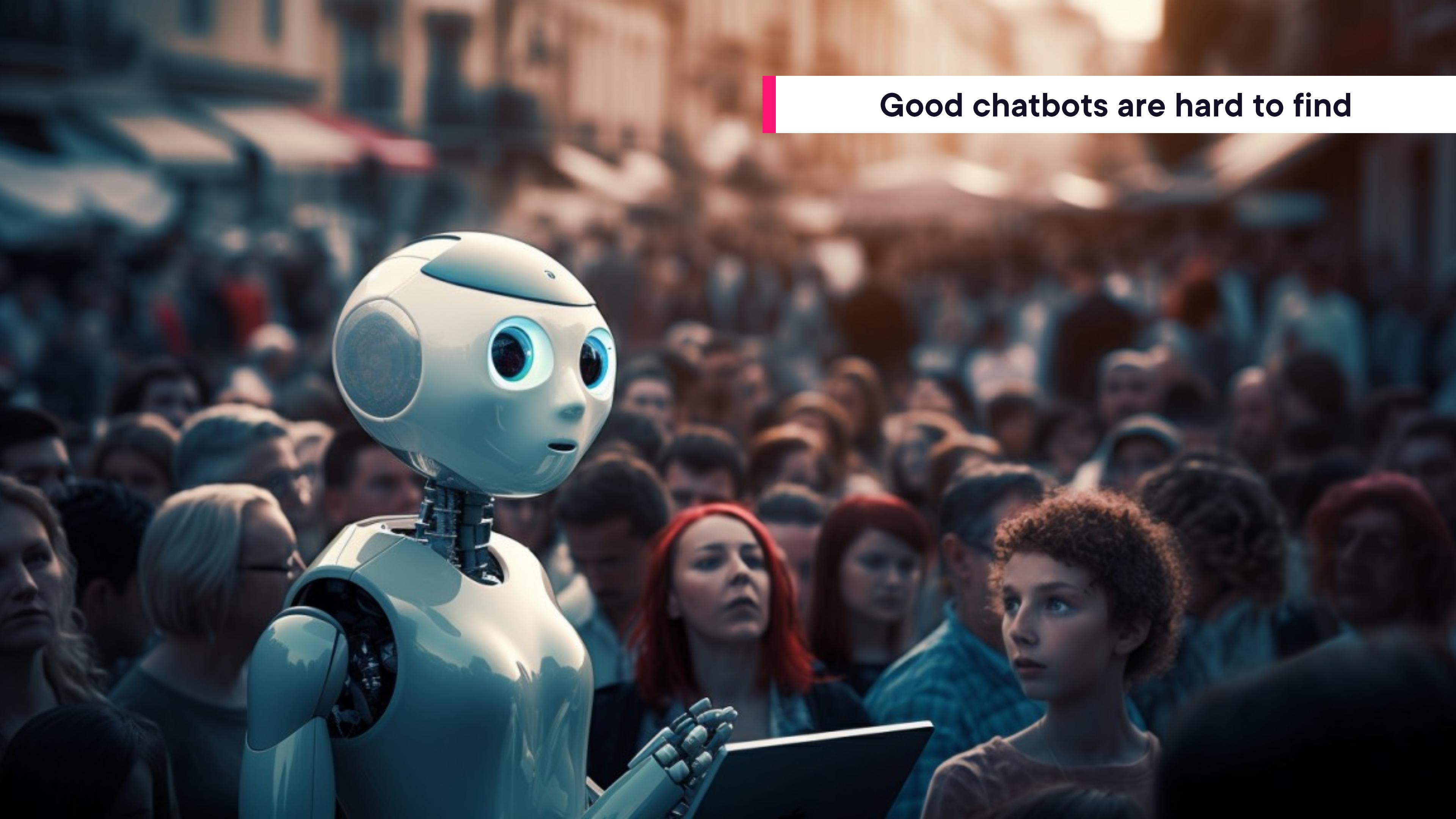


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Helping developers create epic applications

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A white and blue humanoid robot stands prominently in the foreground on the left side of the frame, looking towards the right. It has large, expressive blue eyes and a small mouth. Behind it is a dense, blurred crowd of people of various ages and ethnicities, all looking in the same direction. The background is a soft-focus cityscape with buildings and lights.

Good chatbots are hard to find

Chatbots: Usage and Importance



Benefits Offered by Chatbots

Data collection

Customer service 24/7

Scalability

Continuous learning

Cost savings

Consistency

Multilingual support

Instant responses



Chatbots are not the answer to everything; there are some limitations

Chatbots can't entirely replace humans.

Especially for complex or sensitive issues.

Humans still make a difference.



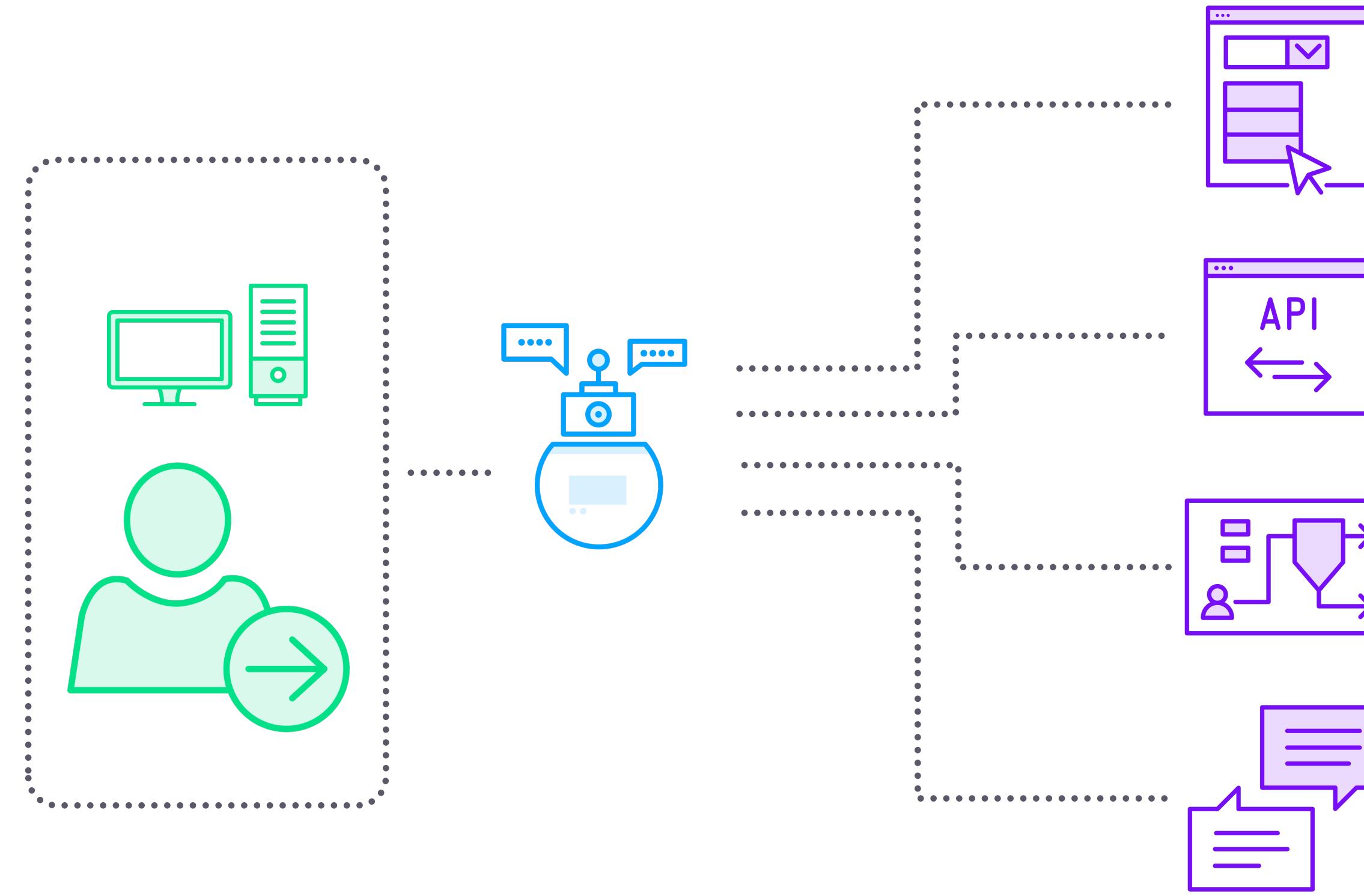


Let me show you how to build a chatbot

Building a ChatBot



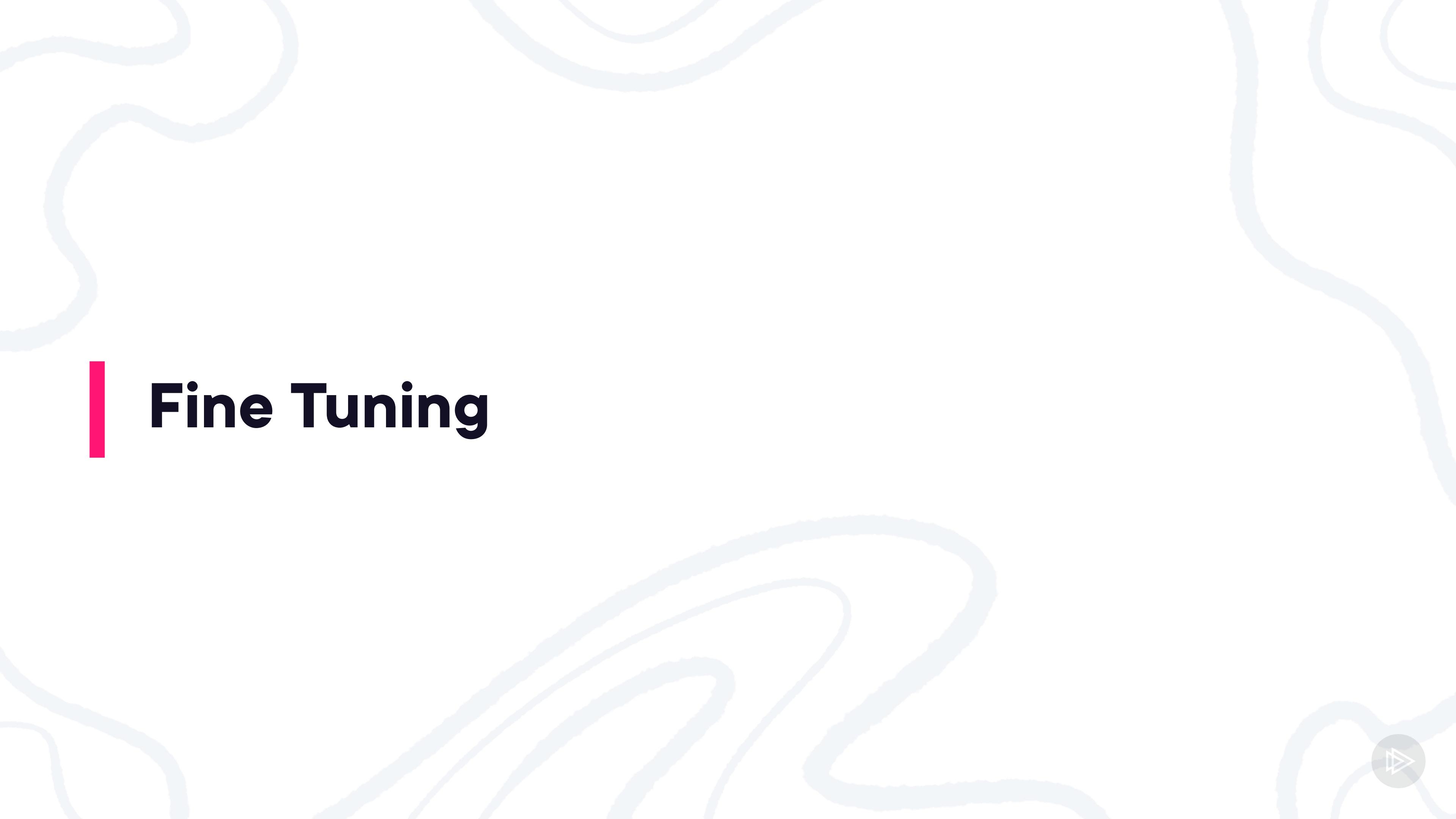
Building a Chatbot





Building a chatbot





Fine Tuning



Not a One Size Fits All Solution

User: What is an LLM?

Chatbot: An LLM (Master of Laws) is an advanced degree in law...

```
[*]: while True:  
    print("User: ")  
    user_prompt = input()  
    response = process_chat_request(user_prompt)  
    print("Chatbot: " + response)  
  
    if user_prompt.lower() in ["bye", "exit", "quit"]:  
        break
```



User:

What is an llm?

Chatbot: An LLM (Master of Laws) is an advanced degree in law that is pursued after completing a Juris Doctor (JD) or equivalent degree. It is a postgraduate program that allows law graduates to specialize in a particular area of law or gain expertise in a specific legal jurisdiction. An LLM program typically involves coursework and may also require the completion of a thesis or research project. It is often pursued by individuals who wish to enhance their legal knowledge and skills, specialize in a niche area of law, or pursue a career in academia or international law.

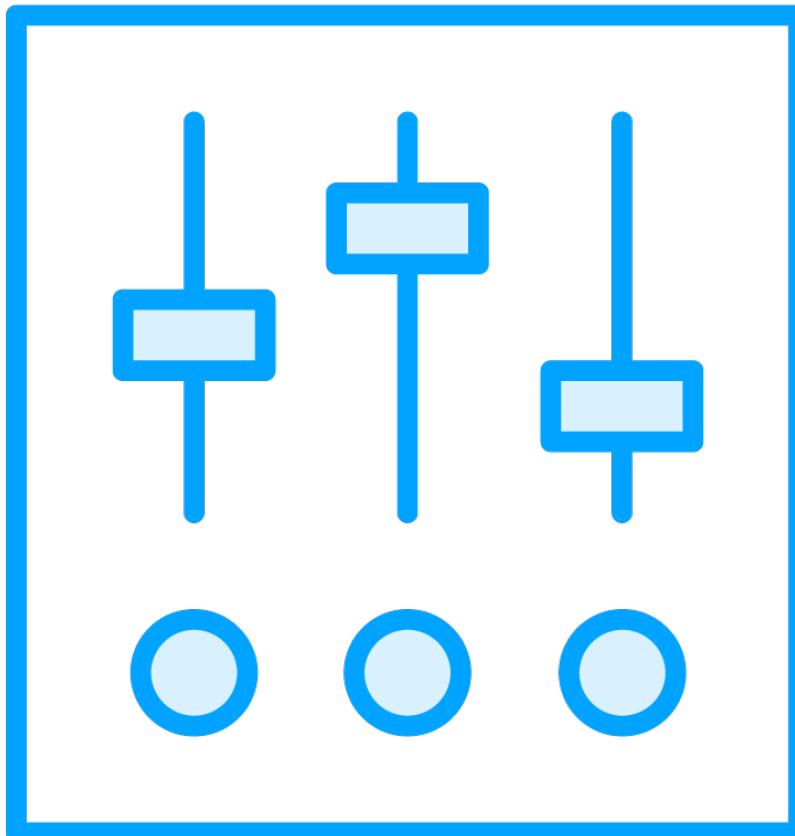
User:

↑↑ for history. Search history with c-↑/c-↓

Fine tuning



Fine Tuning



Process of taking a pre-trained model

- For example, the base GPT model

Further training it on a specific dataset

- Typically a smaller dataset

Specialize or adapt to a particular task or specific domain



Advantages of Fine Tuning



Higher quality results

- Even better than prompt design

Ability to train on more examples than can be fit into a prompt

- It is better than using few-shot learning

Shorter prompts

- Less tokens used



Benefits of Fine Tuning

Specialization

Safety and
reliability

Customization



What is the Difference?

Chatbot

Conversational agent

Simulates conversation

Fine tuning

Technique used to adapt a pre-trained model

To a specific dataset

For specialized interactions





Fine Tuning Models





Fine tuning models

