

Building AI Chatbot with RAG

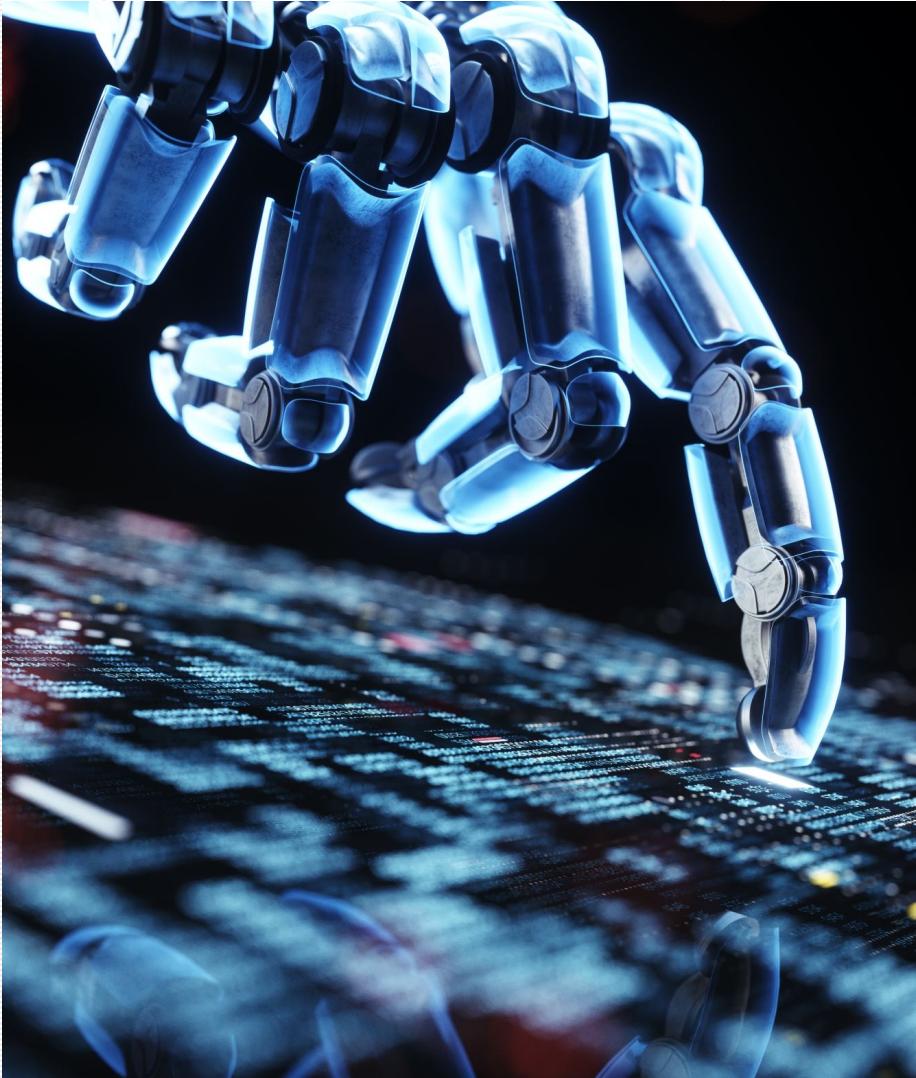
TAUTOLOGY - 27/07/2567

KRIN CHINPRASATSAK

DATASCIENTIST
INSTRUCTOR
SPEAKER

Experienced data scientist, instructor and speaker,
AI consultant for the public and private sectors,
CEO & Co-founder of MADEBYAI and QuantMetric





Agenda

- Setting up AI chatbot
- Chatbot without RAG
- Chatbot with RAG (pdf)
- Chatbot with RAG (json)
- Complex chatbot with RAG
- Deployment
- Connect with Line
- Connection with FB messenger

Setting up AI chatbot



Setting up chatbot



GOOGLE
COLAB



API KEYS



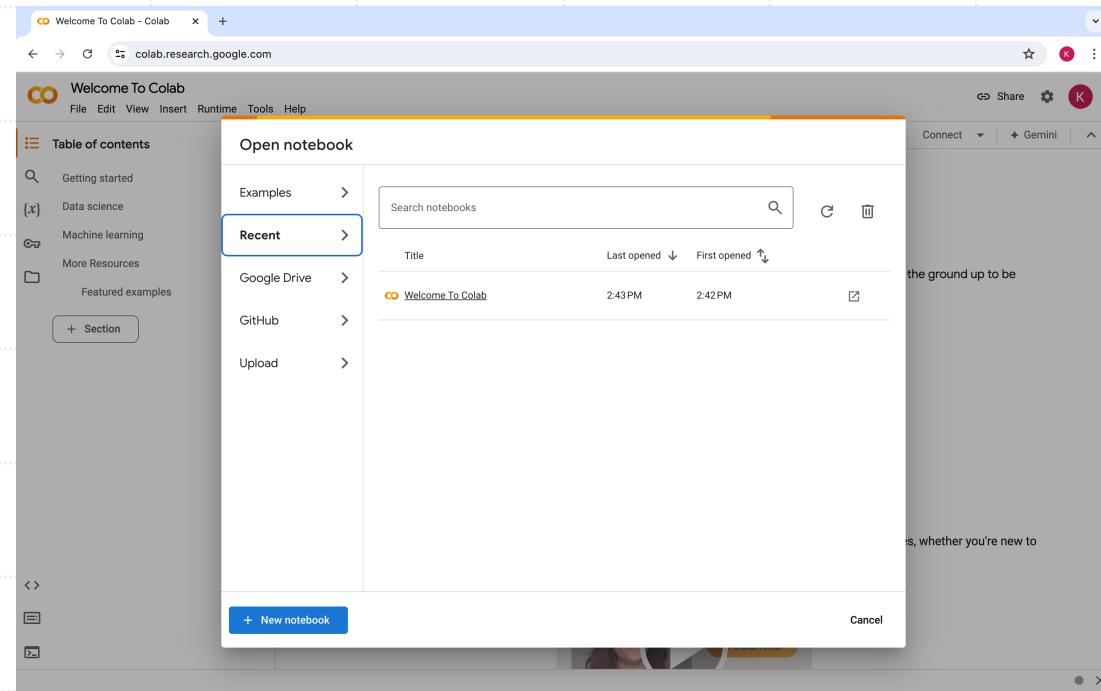
API PRICING



WHY NOT
LLAMA?

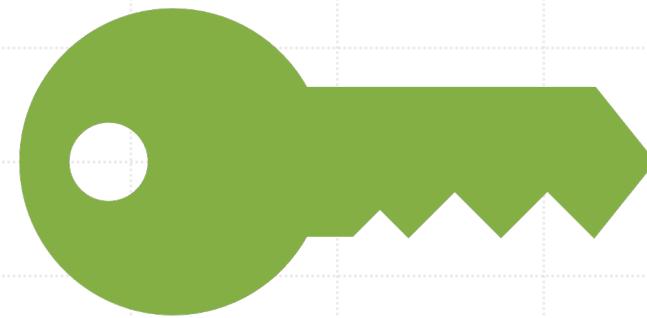
Google Colab

<https://colab.research.google.com/>



API keys

way_to_get_API_keys.pdf





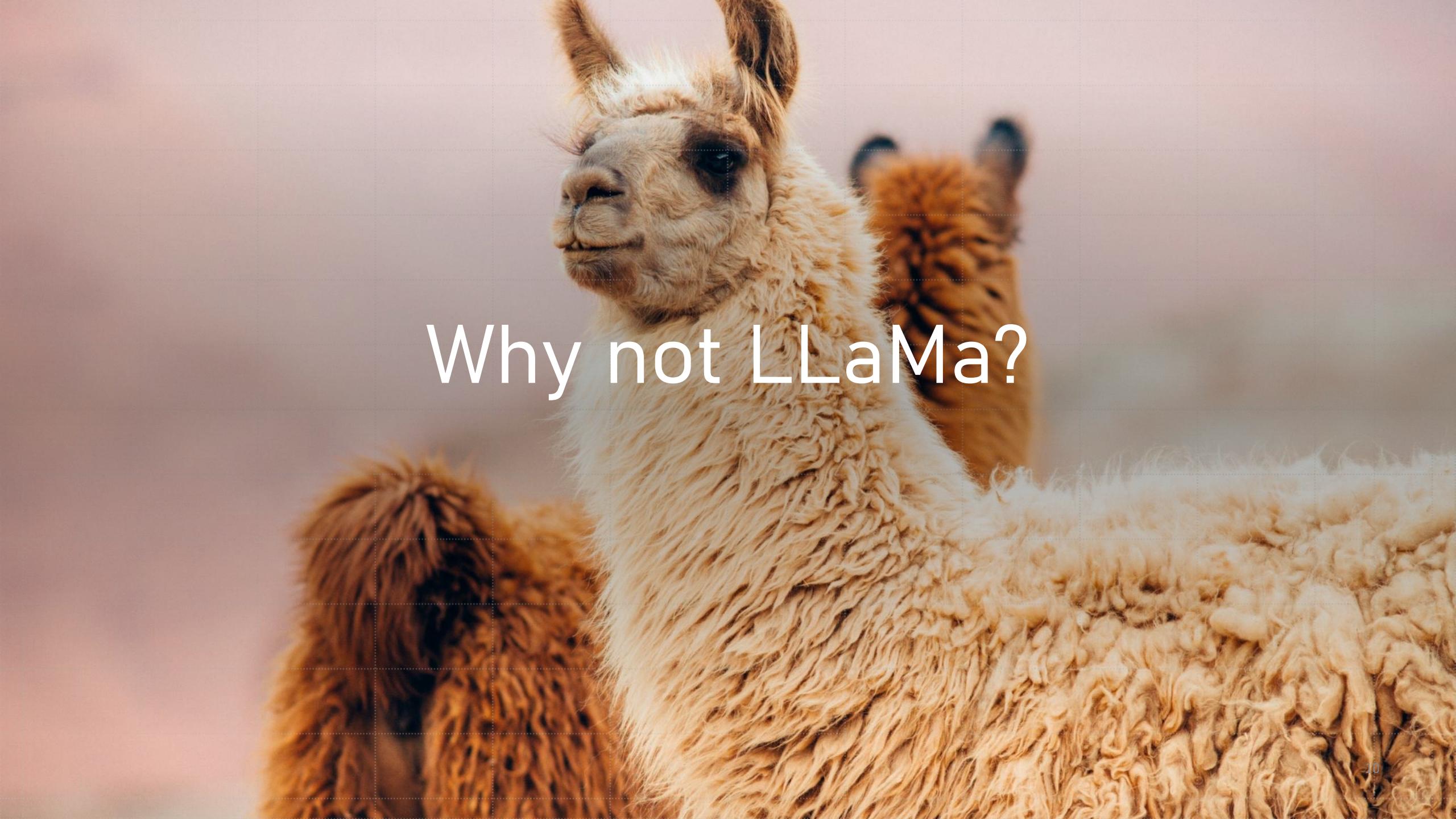
Pricing

- <https://openai.com/api/pricing/>
- <https://ai.google.dev/pricing>
- <https://www.anthropic.com/pricing#anthropic-api>



A blurred background image of a concert crowd with bright stage lights, creating a bokeh effect with various colors like blue, green, and yellow.

SMALL LANGUAGE MODEL VS LARGE LANGUAGE MODEL



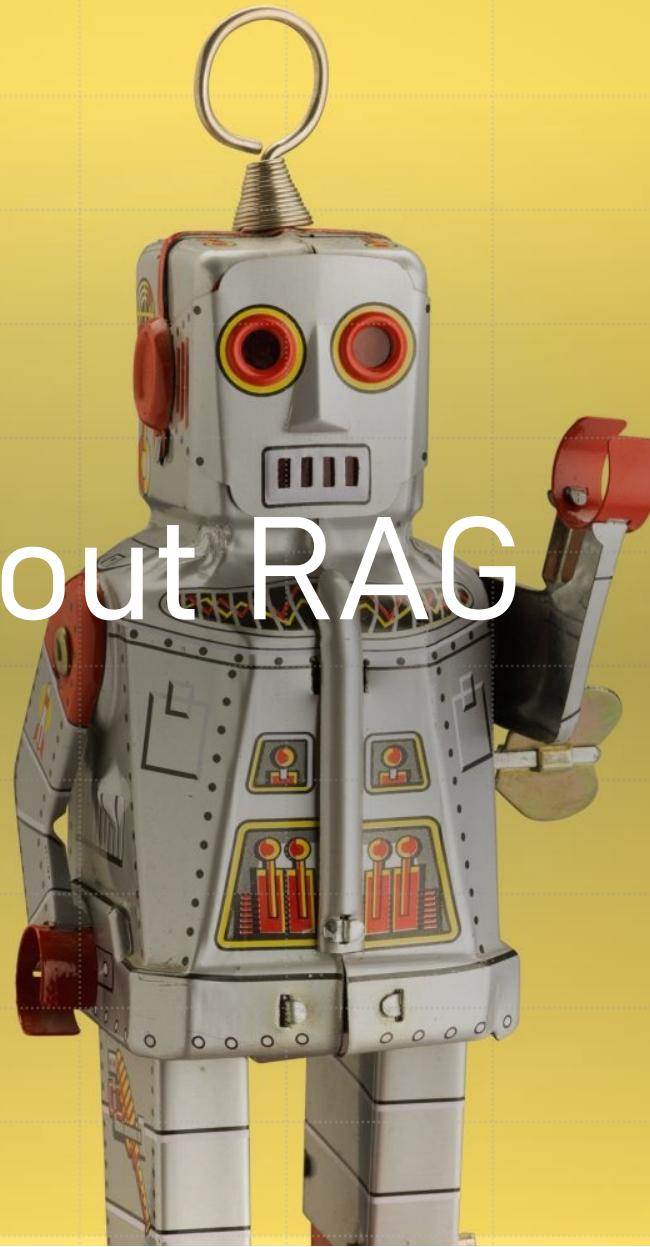
Why not LLaMa?

LLaMa3.1

405B requires 8xH100
8xH100 = \$64/hour
= \$1536/day
= \$46080/month
≈ 1.7 ล้านบาท/เดือน

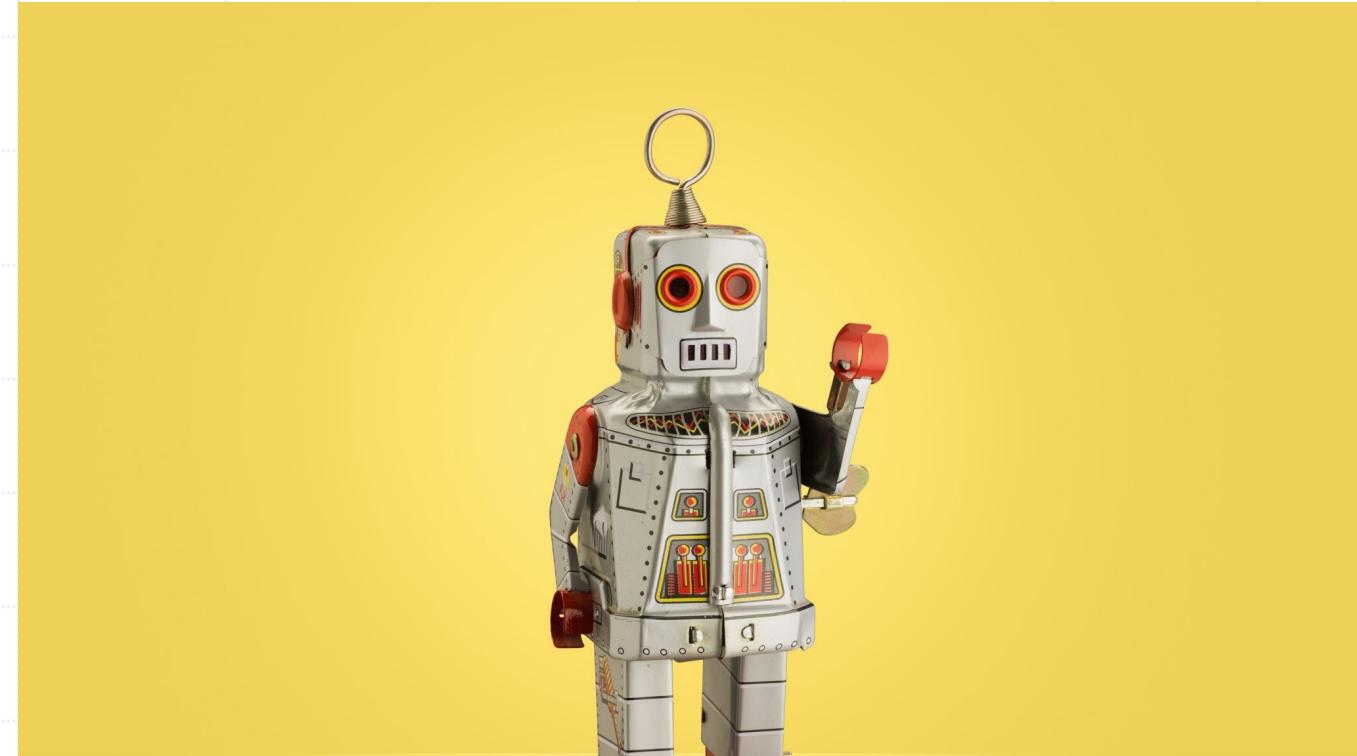


Chatbot without RAG



Chatbot without RAG

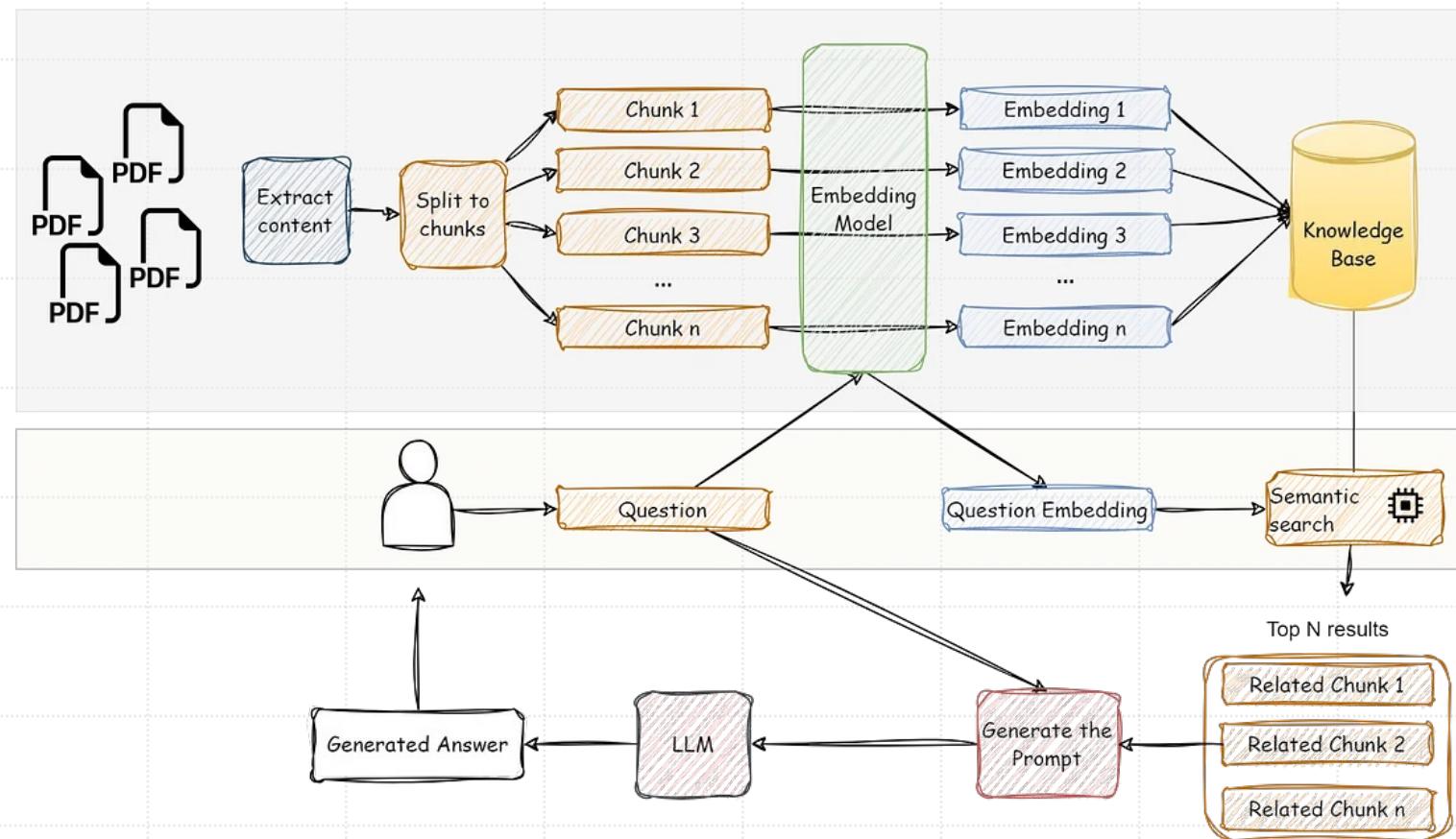
- ChatGPT_without_RAG.ipynb
- Claude without RAG.ipynb
- Gemini without RAG.ipynb



Chatbot with RAG (pdf)

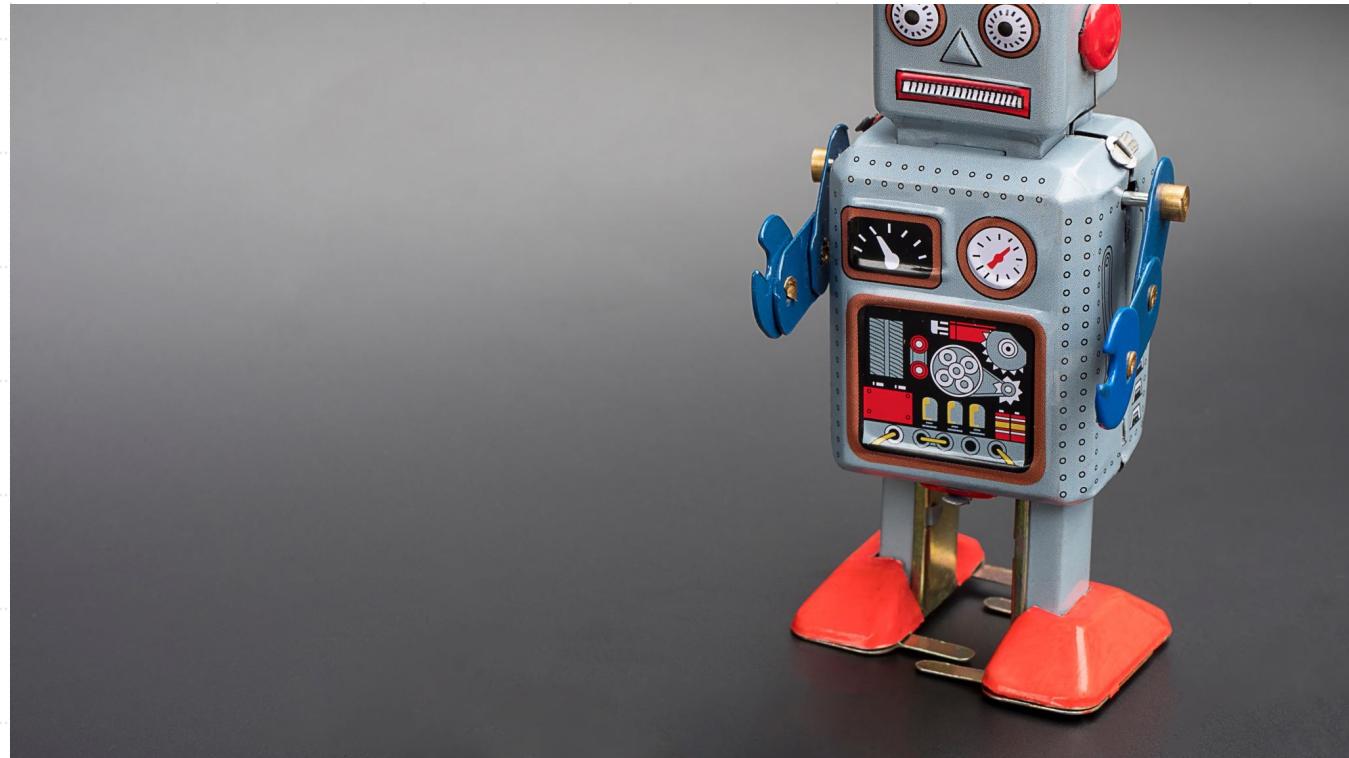


Chatbot with RAG (pdf)

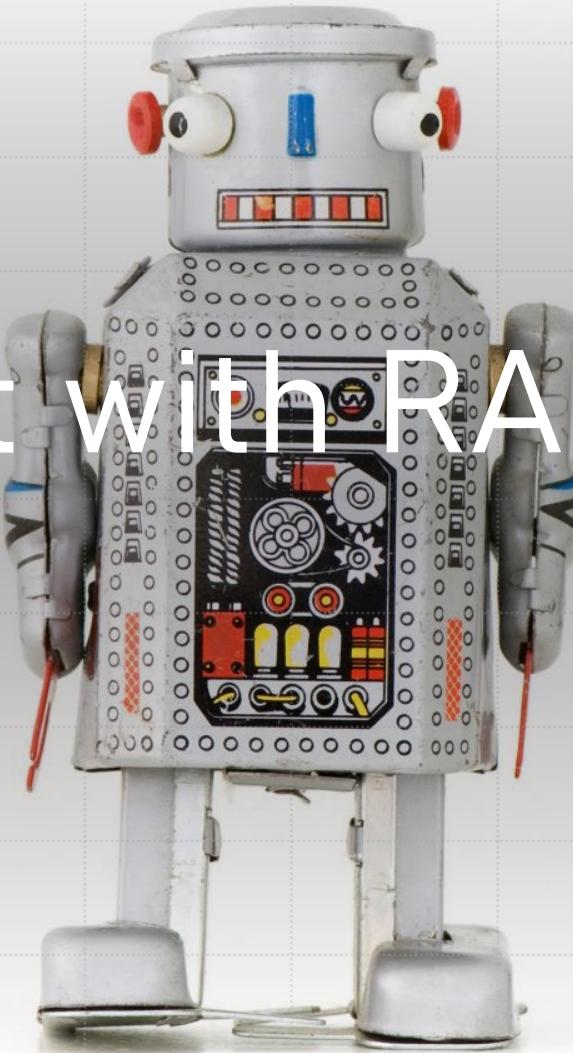


Chatbot with RAG (pdf)

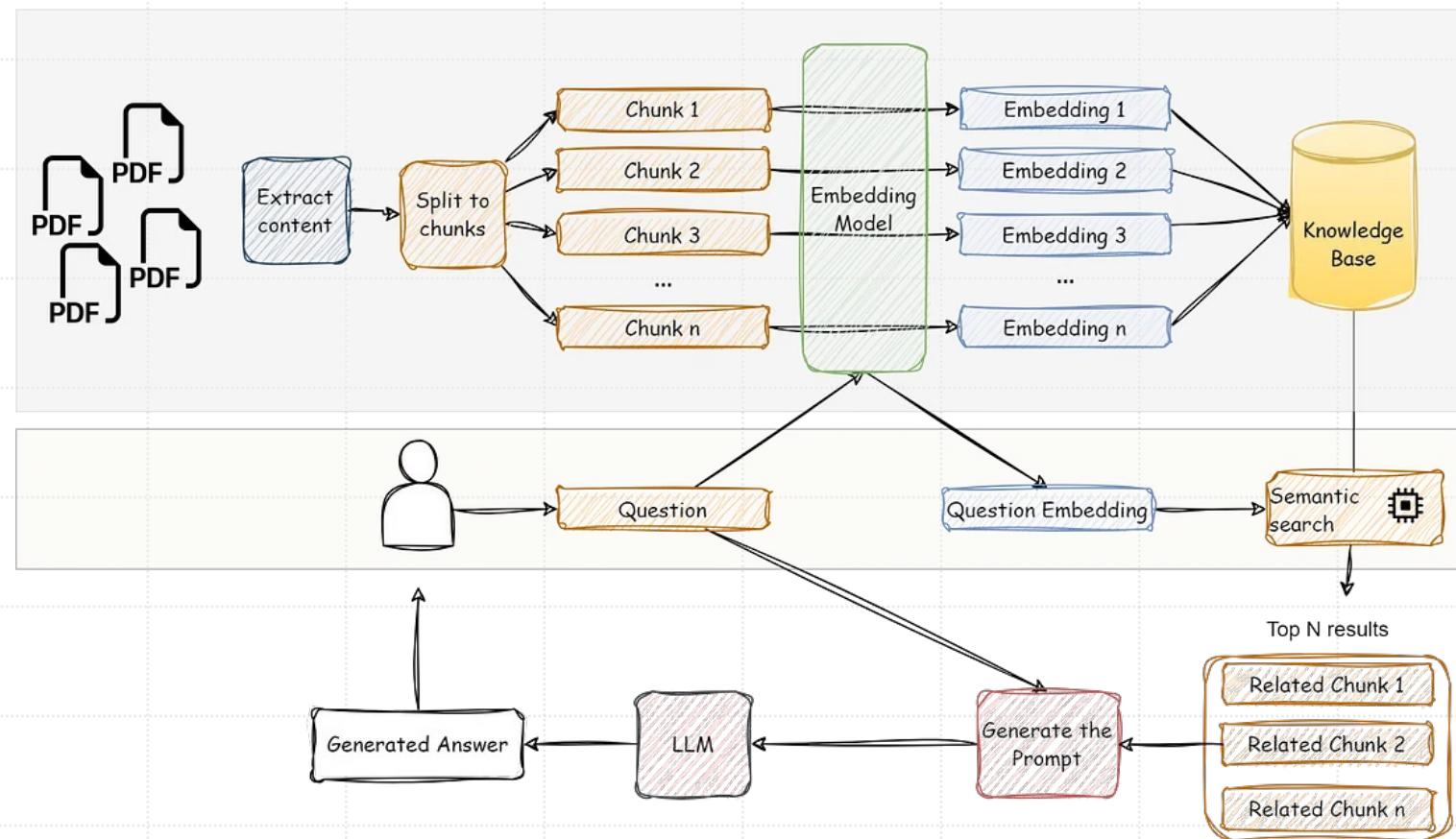
- ChatGPT_with_RAG_(pdf).ipynb
- Claude_with_RAG_(pdf).ipynb
- Gemini_without_RAG_(pdf).ipynb



Chatbot with RAG (json)

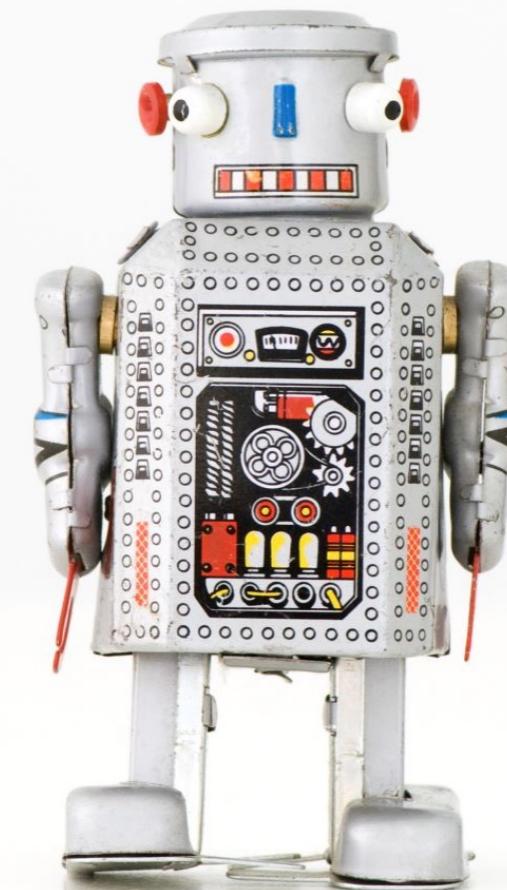


Chatbot with RAG (pdf)

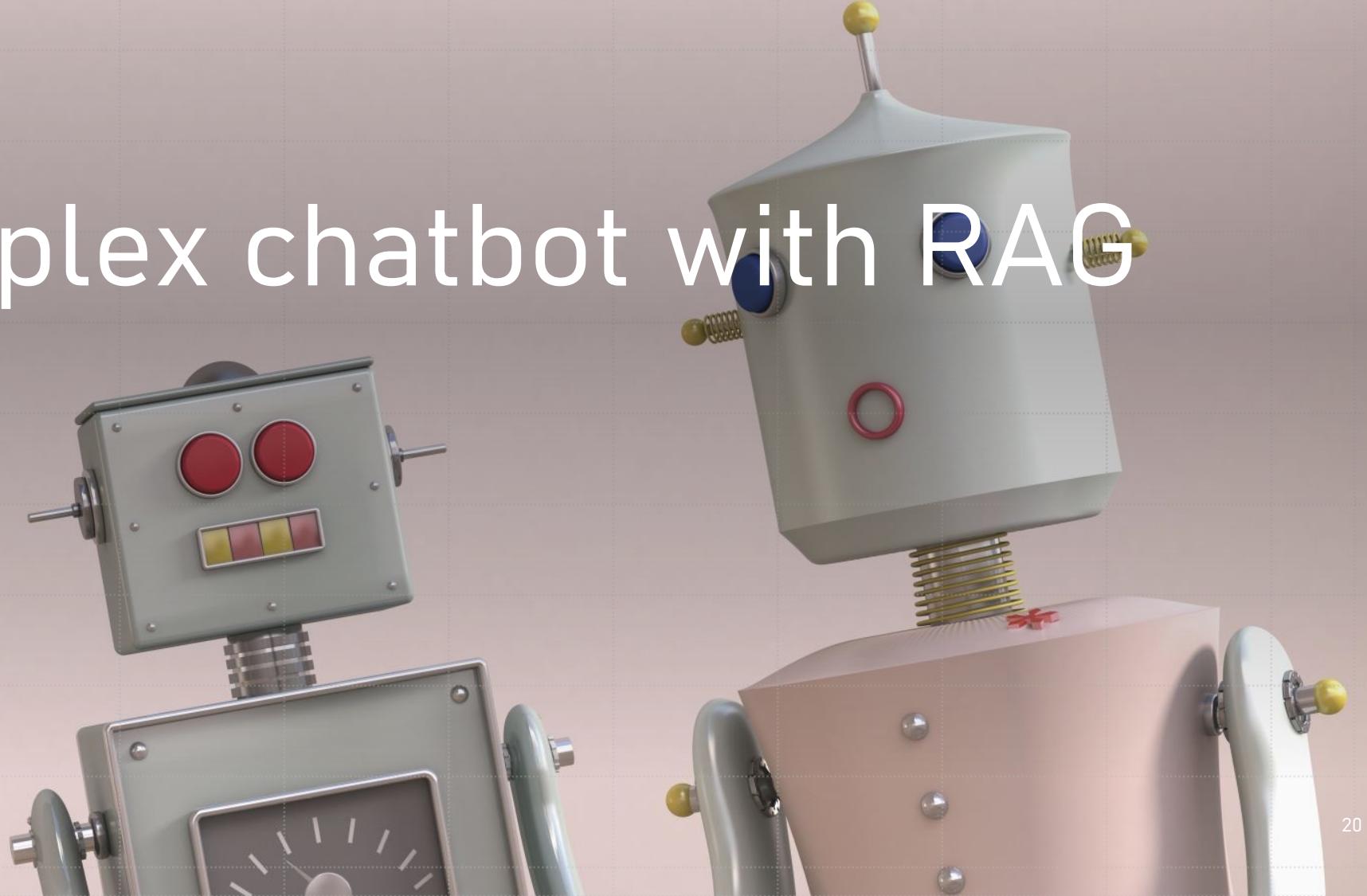


Chatbot with RAG (json)

- ChatGPT_with_RAG_(json).ipynb
- Claude_with_RAG_(json).ipynb
- Gemini_without_RAG_(json).ipynb



Complex chatbot with RAG

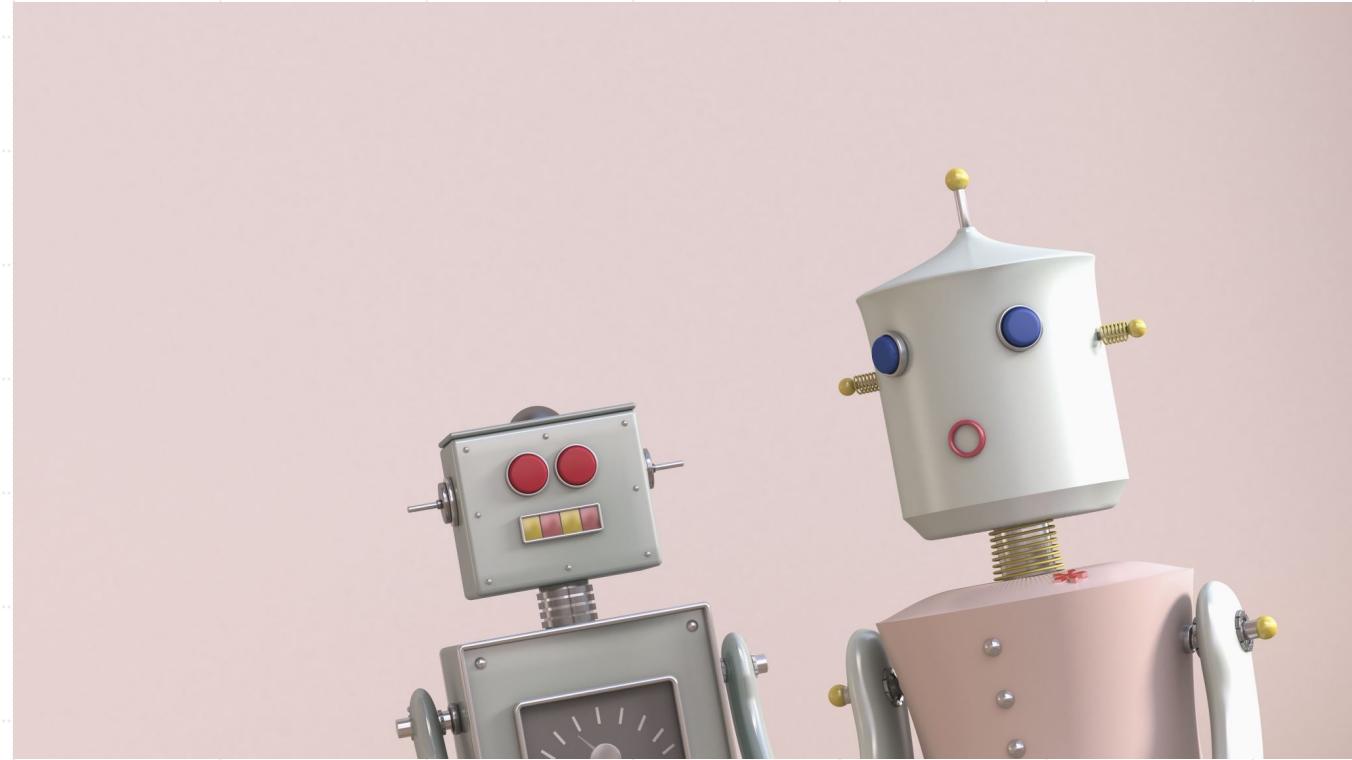




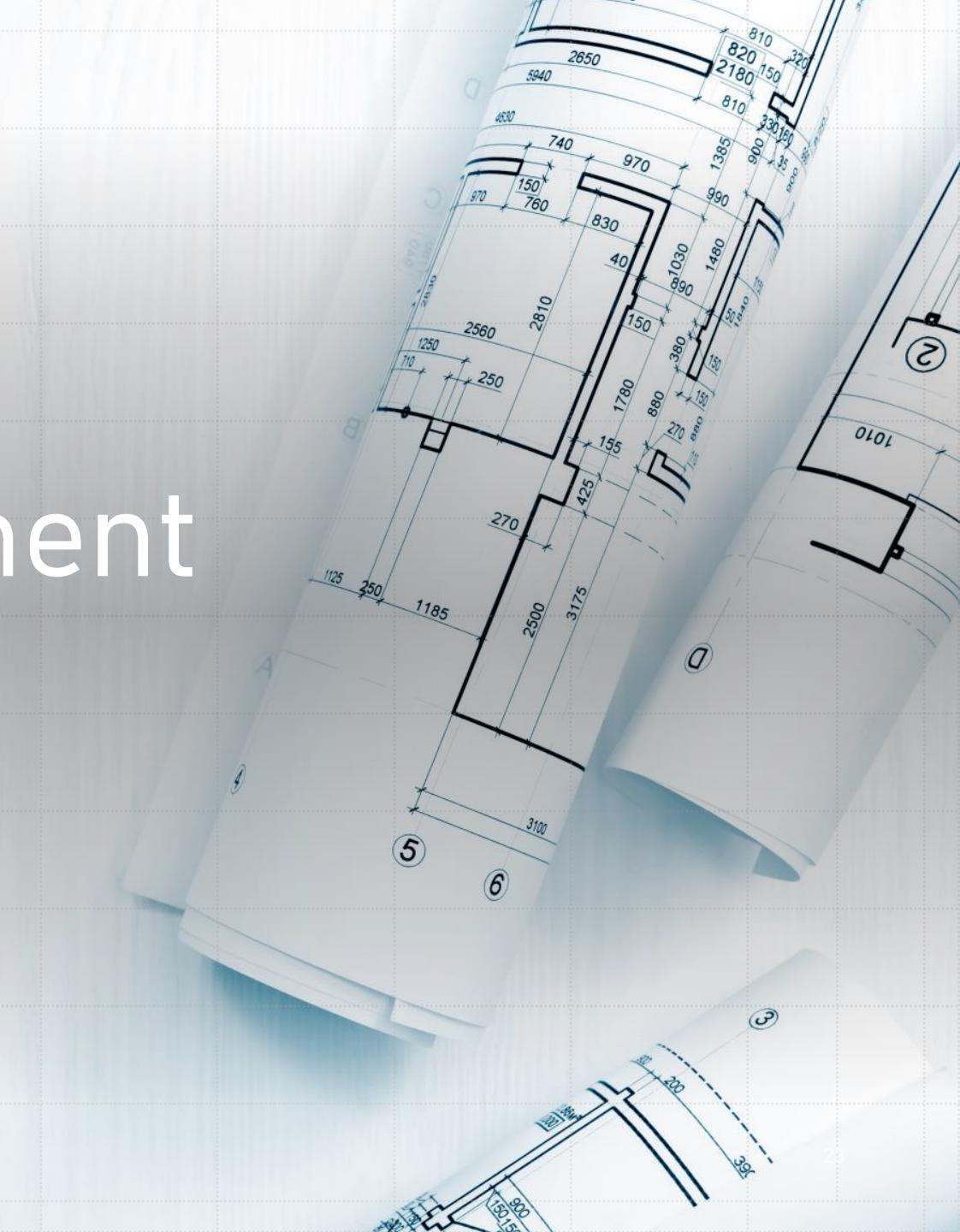
Complex chatbot with RAG

Complex chatbot with RAG

- Complex_ChatGPT_with_RAG.ipynb
- Complex_Claude_with_RAG.ipynb
- Complex_Gemini_without_RAG.ipynb



Deployment





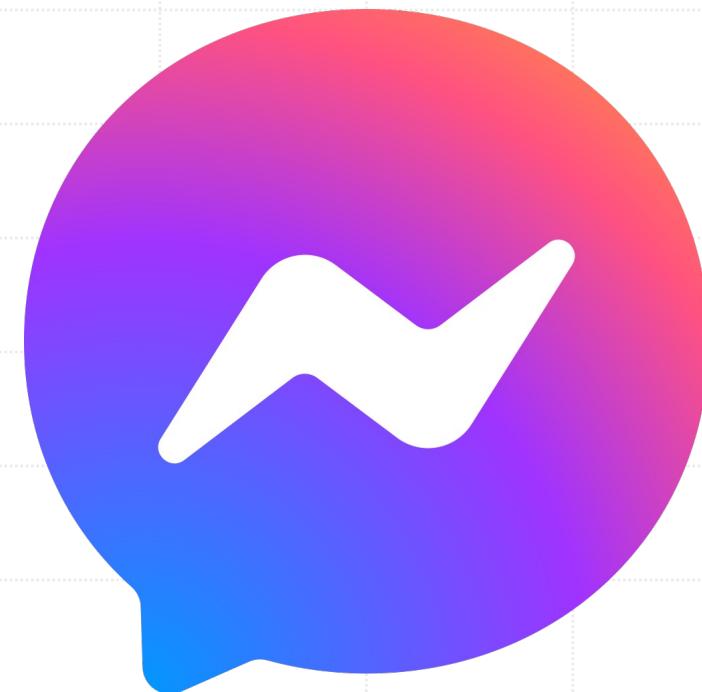
Connect with Line

Line_Console.pdf



Connect with FB messenger

FB_Messenger_Console.pdf



THANK YOU

