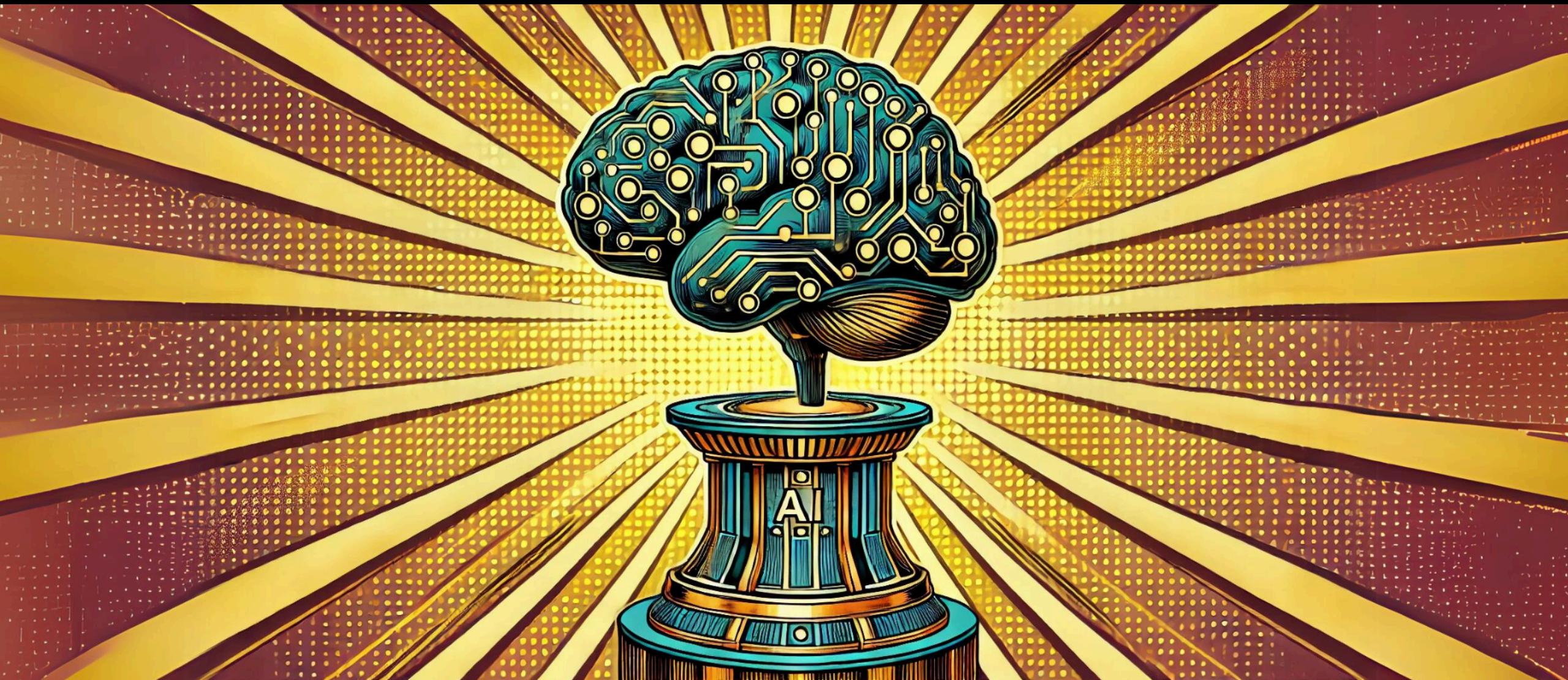


LLM Engineering

MASTER AI AND LARGE LANGUAGE MODELS





DAY 2

Your journey continues!

What you can do **ALREADY**

- Write code to call OpenAI's frontier models
- Distinguish between the System and User prompt
- Summarization

What you will do **TODAY**

- Know exactly the steps to get to LLM mastery
- Be set up for success
- Recognize the leading Frontier Models and how to use them

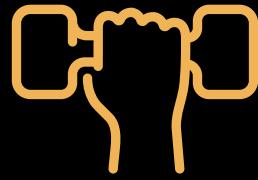


This is a practical course

Divided into 8 "weeks" to level up your skills each week



Each week starts with a business challenge



You strengthen skills and knowledge through practical examples



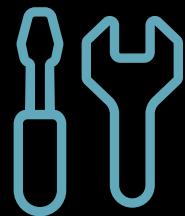
We code the solution
You extend it
You upskill

You will master these 3 dimensions of LLM engineering



Models

- Open-Source
- Closed Source
- Multi-modal
- Architecture
- Selecting



Tools

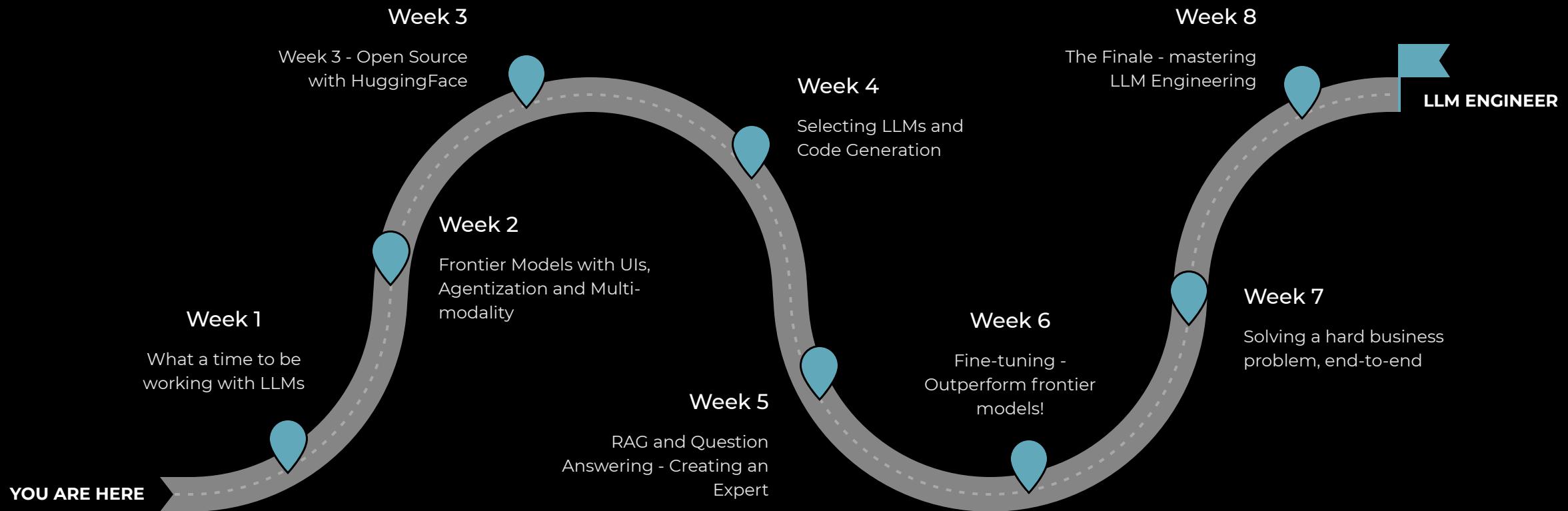
- HuggingFace
- LangChain
- Gradio
- Weights & Biases
- Modal



Techniques

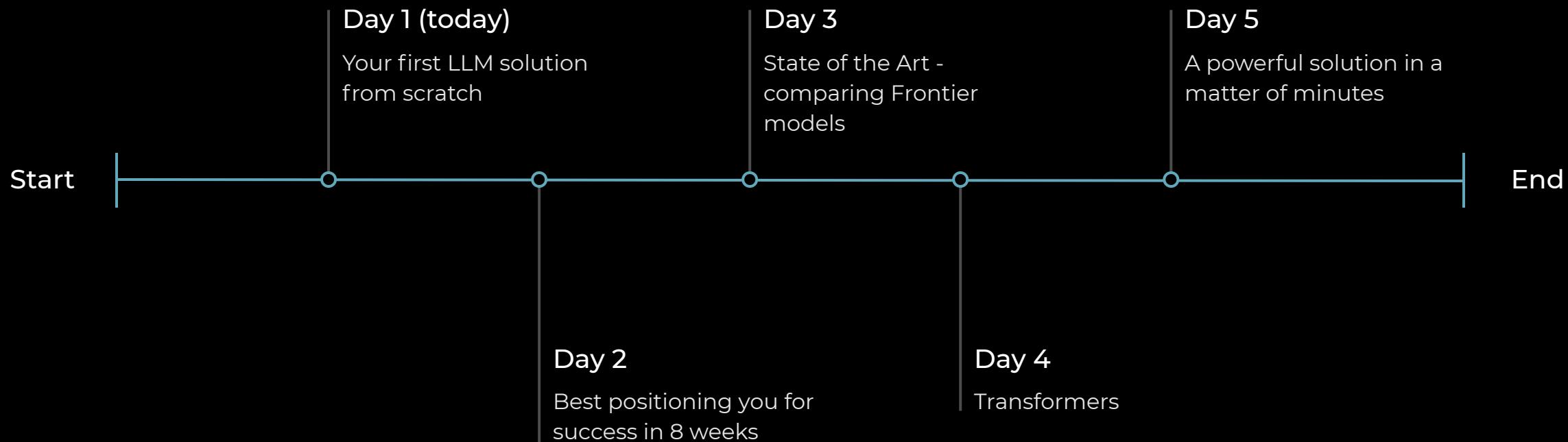
- APIs
- Multi-shot prompting
- RAG
- Fine-tuning
- Agentization

RECAP: Your 8 week journey to mastery



Recap: How you will level up in Week 1

You will understand Frontier Models and their APIs and will have coded your own solutions



Pace it right



Too easy

Hang in there! This course will build every day. There are hard, fun projects coming up.



Too challenging

Take your time with the practicals, retake courses and ask for help

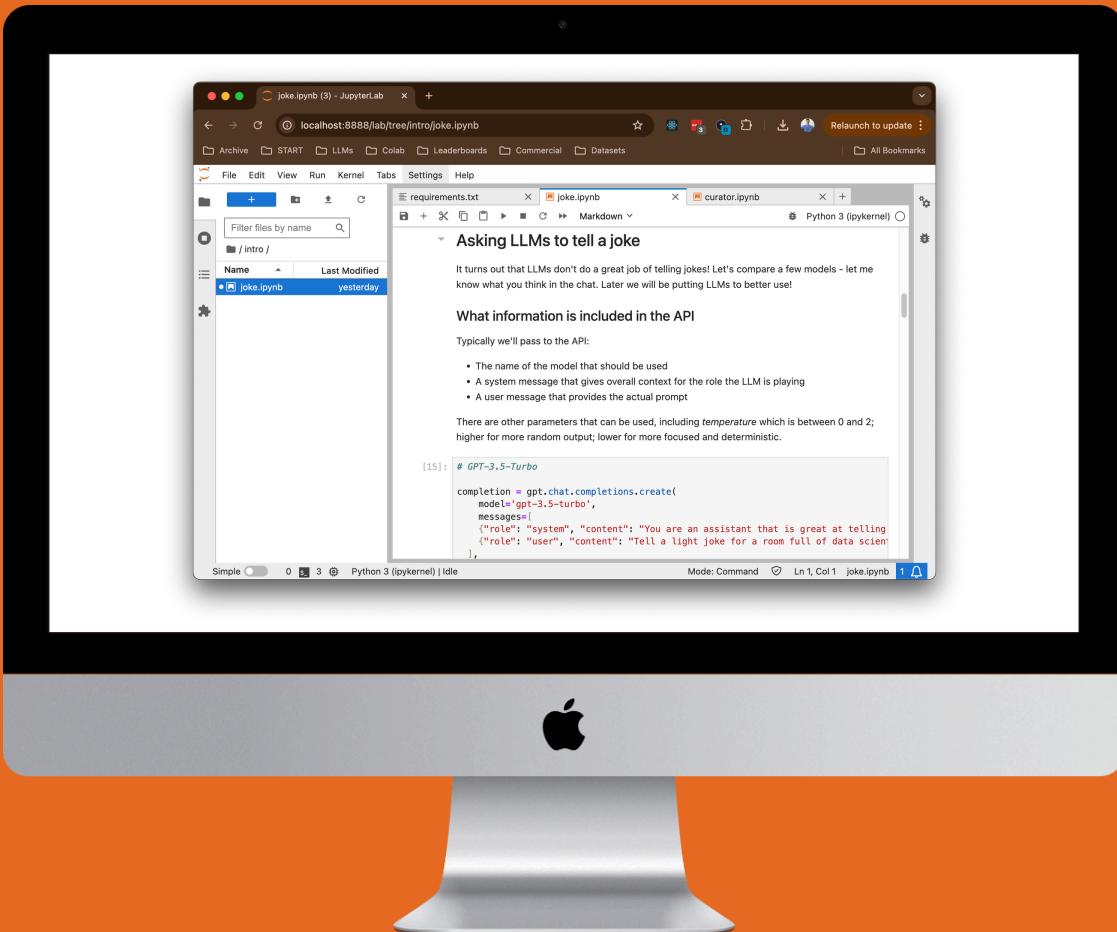


Just right

EXCELLENT

Setting you up for success

Getting the very most out of this course



- Follow along with the coding
- Extend the solutions with your ideas
- Review the resources
- STICK AT IT!!

The Cherry On Top

Tools and resources

That you can put into action from Day One

Your code cookbook

Useful, reusable code gives a head-start in your own projects

Juicy extra content left for the very end

An extra incentive to keep going



Introducing the frontier



Closed Source

GPT from OpenAI
Claude from Anthropic
Gemini from Google
Command R from Cohere
Perplexity



Open Source

Llama from Meta
Mixtral from Mistral
Qwen from Alibaba Cloud
Yi from 01.ai
Phi from Microsoft

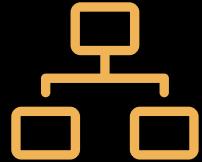


Three ways to use models



Through chat interfaces

Like ChatGPT!

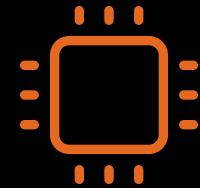


Through APIs

Using the specific library for that LLM

Using common frameworks like LangChain

Using managed AI cloud services like
Amazon Bedrock, Google Vertex and
Azure Machine Learning



Direct inference

With the HuggingFace Transformers library

With llama.cpp to run locally on your box



PROGRESS REPORT

5% Towards Mastery

What you can do ALREADY

- Understand the progression to become proficient
 - Have a first impression of the frontier LLMs
 - And from last lecture: use OpenAI API to make summaries
-

What you'll be able to do NEXT TIME

- Compare the top 6 Frontier models
- Appreciate what they do well
- Recognize the areas where they struggle