

BUILDING AI WEB APPS

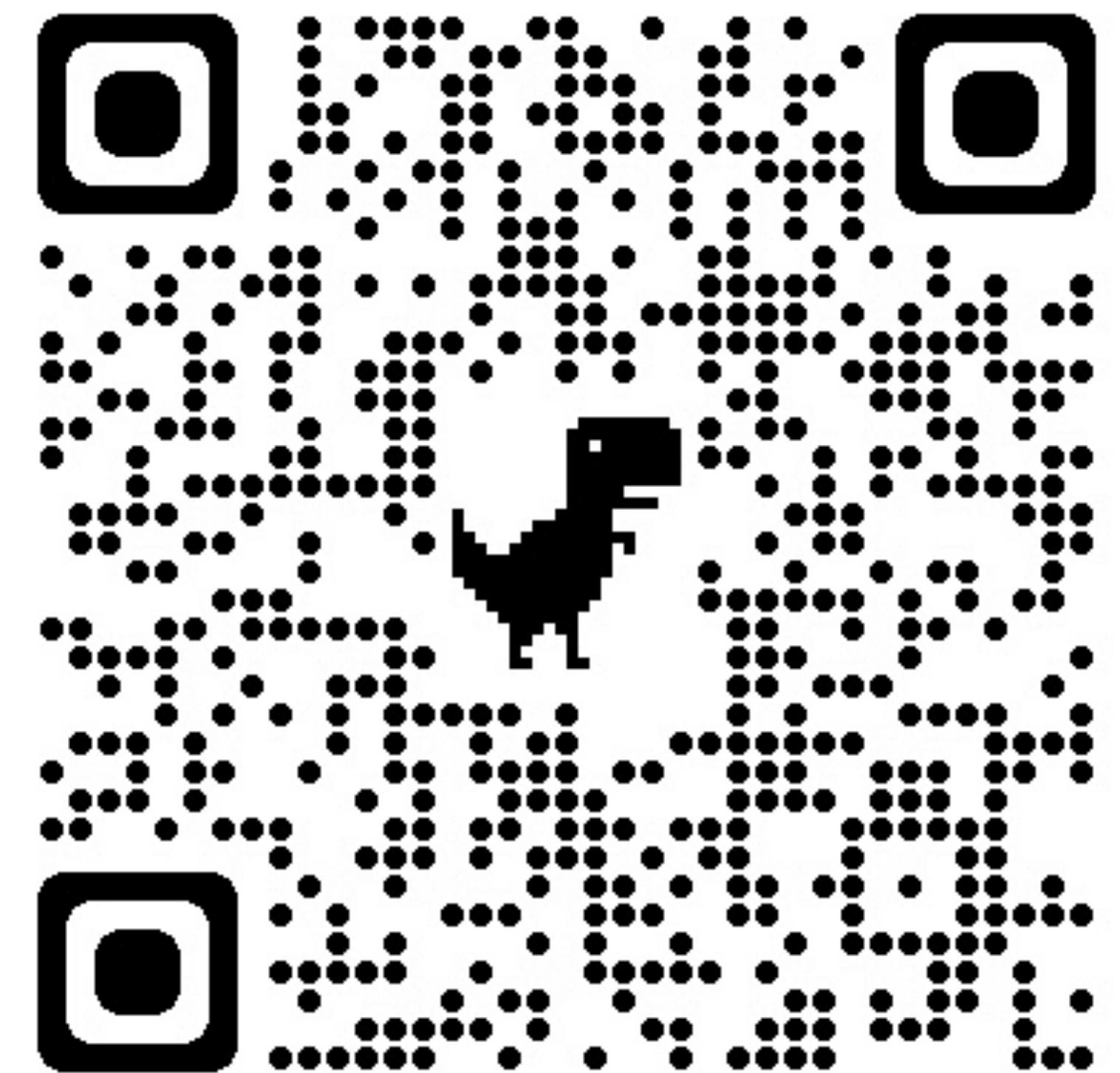
SHRUTI KAPOOR

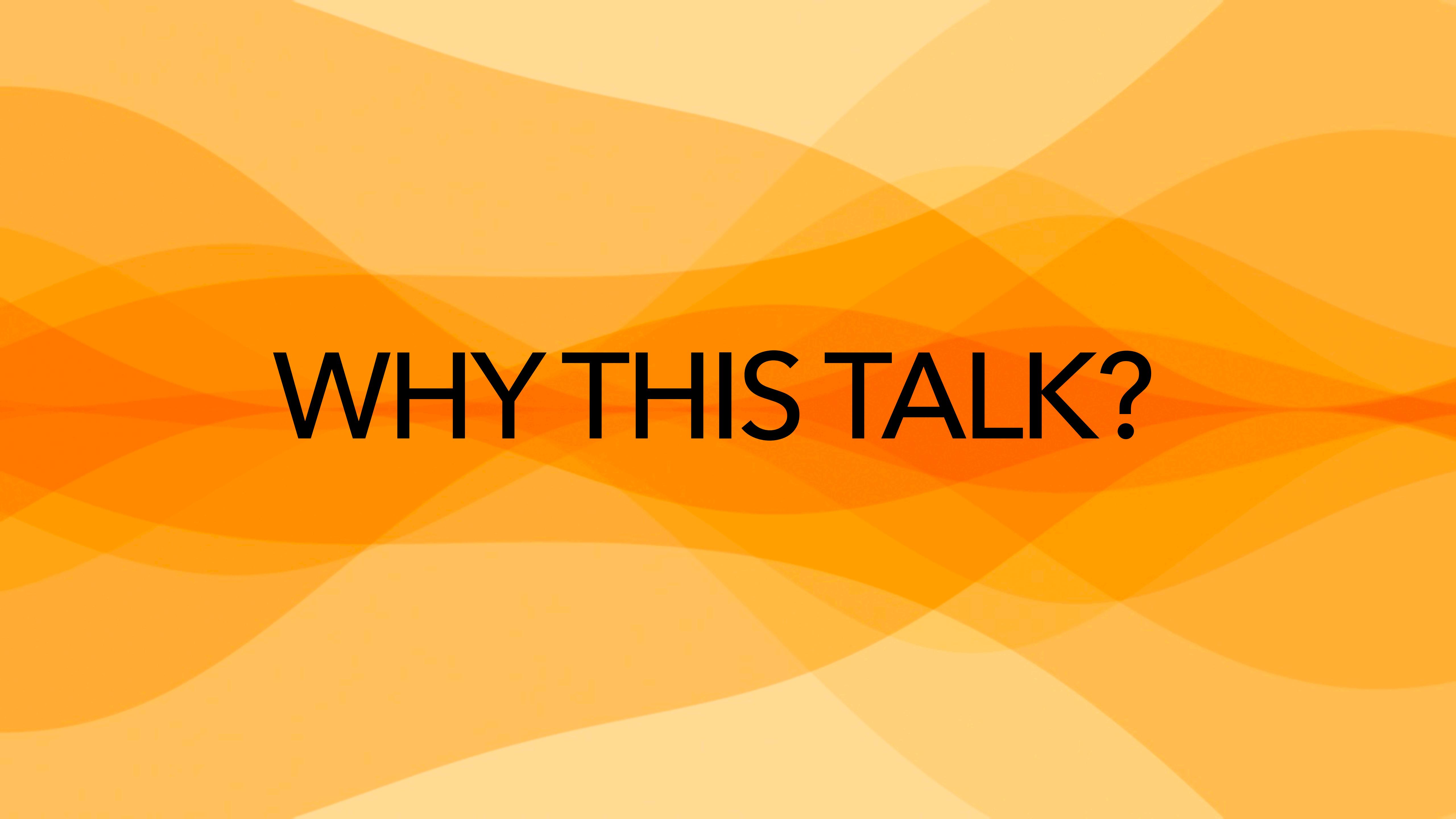


SHRUTI KAPOOR

**On a mission to make front end
development easier for everyone**

@shrutikapoor08





WHY THIS TALK?



PHASES OF ADOPTION OF AI

Phase 1: Fear

Phase 2: Denial

Phase 3: FOMO

Phase 4: Adoption

Phase 5: Pro

ONE DAY....

Phase 1: Fear

Phase 2: Denial

Phase 3: FOMO

Phase 4: Adoption

Phase 5: Pro



DISCLAIMER

NOT AN EXPERT

BUILD A WEB APP
W/ LANGCHAIN &
OPENAI

OUTLINE

Glossary

Building a web app - Demo

Path Forward

GLOSSARY

EXPLAIN LIKE I AM FIVE

LLM

LARGE LANGUAGE MODEL



LLM - LARGE LANGUAGE MODEL

Your sister is the LLM

LLM - LARGE LANGUAGE MODEL

Natural Language Processing

Generate text

Answer questions

“Large” refers to the number of parameters the language model can change autonomously as it learns

PROMPT



PROMPT

You tell your sister what you want to do or learn

You ask her “What is XXX?”

You tell her “Let’s do XXX”

PROMPT

A special instruction or question to a machine learning model

PROMPTS

“Find the bug in this code ... <CODE>”

“Fix typo in this text...<TEXT>”

“Write a poem in Shakespeare style”

TOKEN



TOKEN

Your sister explains to you in a small story

The story is a “token”

TOKEN

Small meaningful blocks of information

Basic units LLM AI uses to process and generate language.

Tokens can be characters, words, subwords, or other segments of text or code, depending on the chosen tokenization method or scheme.

TOKEN

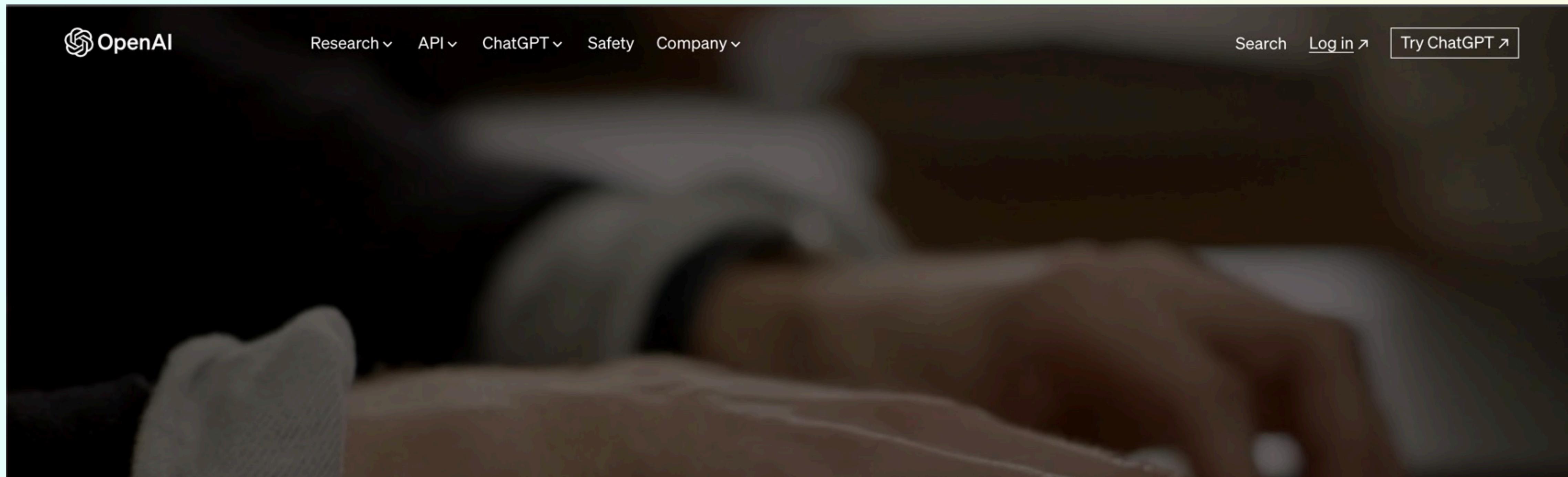
"The cat is sleeping." would be divided into four tokens:
"The," "cat," "is," and “sleeping.”

BUILDING A WEB APP

QUESTIONS TO ANSWER FOR ADOPTION

Where to start?

OPENAI



QUESTIONS TO ANSWER FOR ADOPTION

Which language to use?



QUESTIONS TO ANSWER FOR ADOPTION

Which framework to use?

LANGCHAIN

QUESTIONS TO ANSWER FOR ADOPTION

Do I need to train models? **NO**

QUESTIONS TO ANSWER FOR ADOPTION

How much will it cost?

HOWEVER
MUCH
YOU
GOT

BUILDING THE APP



BUILDING THE WEB APP

Front End

Back End

AI Service

INTEGRATING WITH OPENAI AND LANGCHAIN

Sign up for a dev account

Get api key

Give them your money

SETTING UP LANGCHAIN

npm install -S langchain

```
import { OpenAI } from "langchain/lms/openai";
```

IMPORTING AN LLM FROM OPENAI

```
import { OpenAI } from "langchain/llms/openai";  
const llm = new OpenAI({  
  openAIApiKey: "YOUR_KEY_HERE",  
});
```

FUNDAMENTAL BLOCK OF AI SERVICE

Prompts : style of creating inputs that LLM can understand

Models: data that the LLM is trained on.

Parsers: taking output of the model and parsing it into a more structured format easy to understand

FUNDAMENTAL BLOCKS OF AI SERVICE



DEMO



PATH FORWARD

FOUR AI APPS CATEGORY



FOUR APPS CATEGORIES

Companionship

Question answering

Utility

Creativity



WHERE TO
START



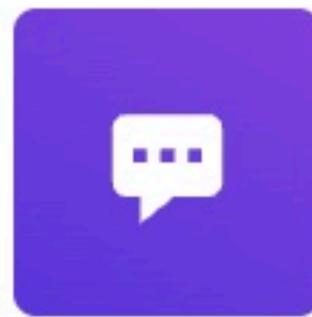
Quickstart tutorial

Learn by building a quick sample app

Examples

Explore some example tasks

Build an application



GPT

Learn how to generate text and call functions



GPT best practices

Learn best practices for building with GPT models



Embeddings

Learn how to search, classify, and compare text



Speech to text

Learn how to turn audio into text

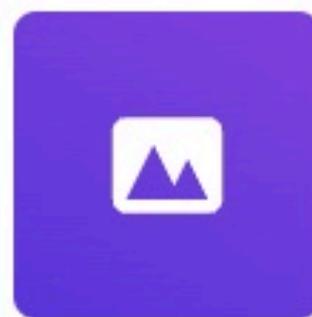


Image generation

Learn how to generate or edit images



Fine-tuning

Learn how to train a model for your use case

LangChain for LLM Application Development

Overview



LangChain



DeepLearning.AI

NOW YOUR TURN



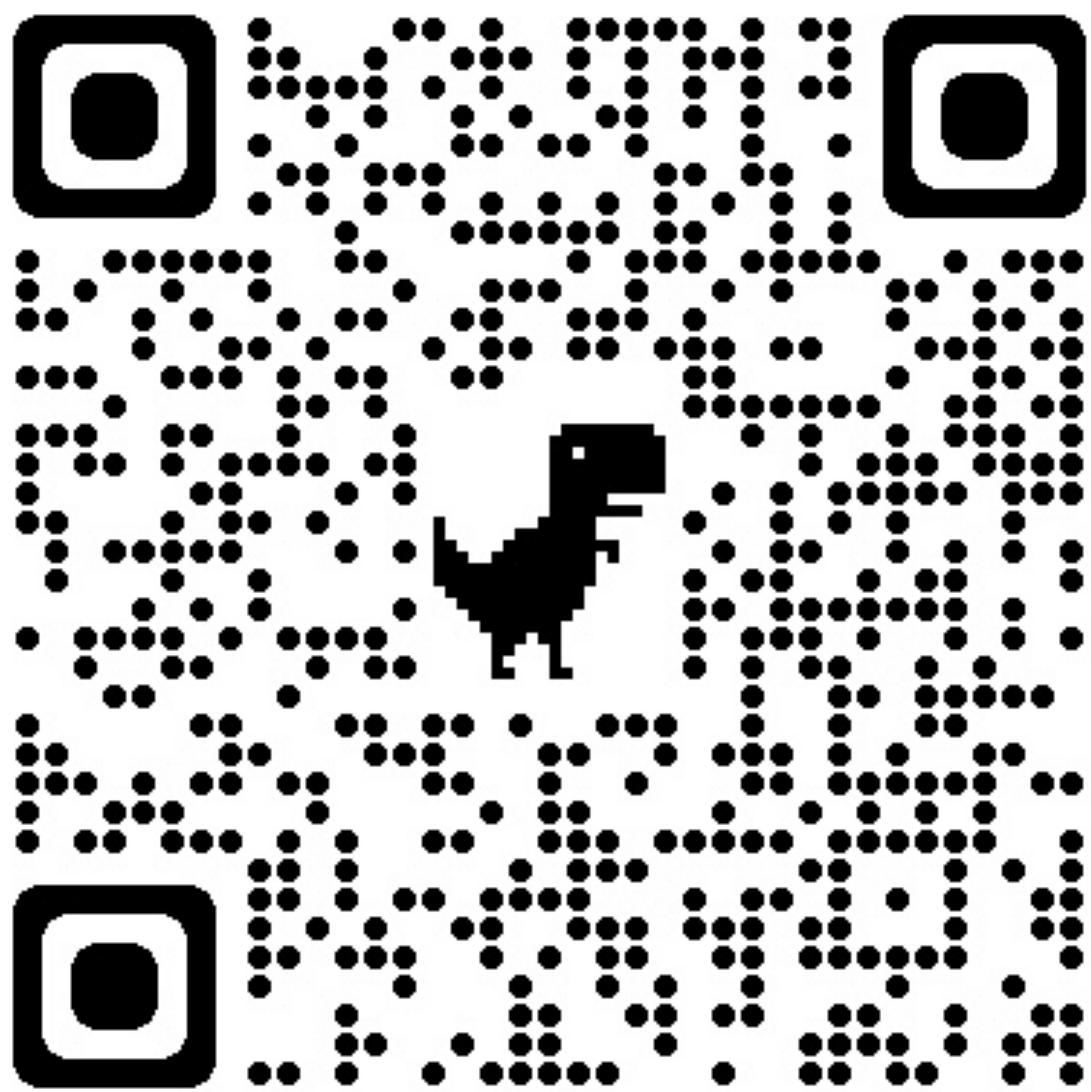
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AI TUTORIALS COMING UP ...



Search

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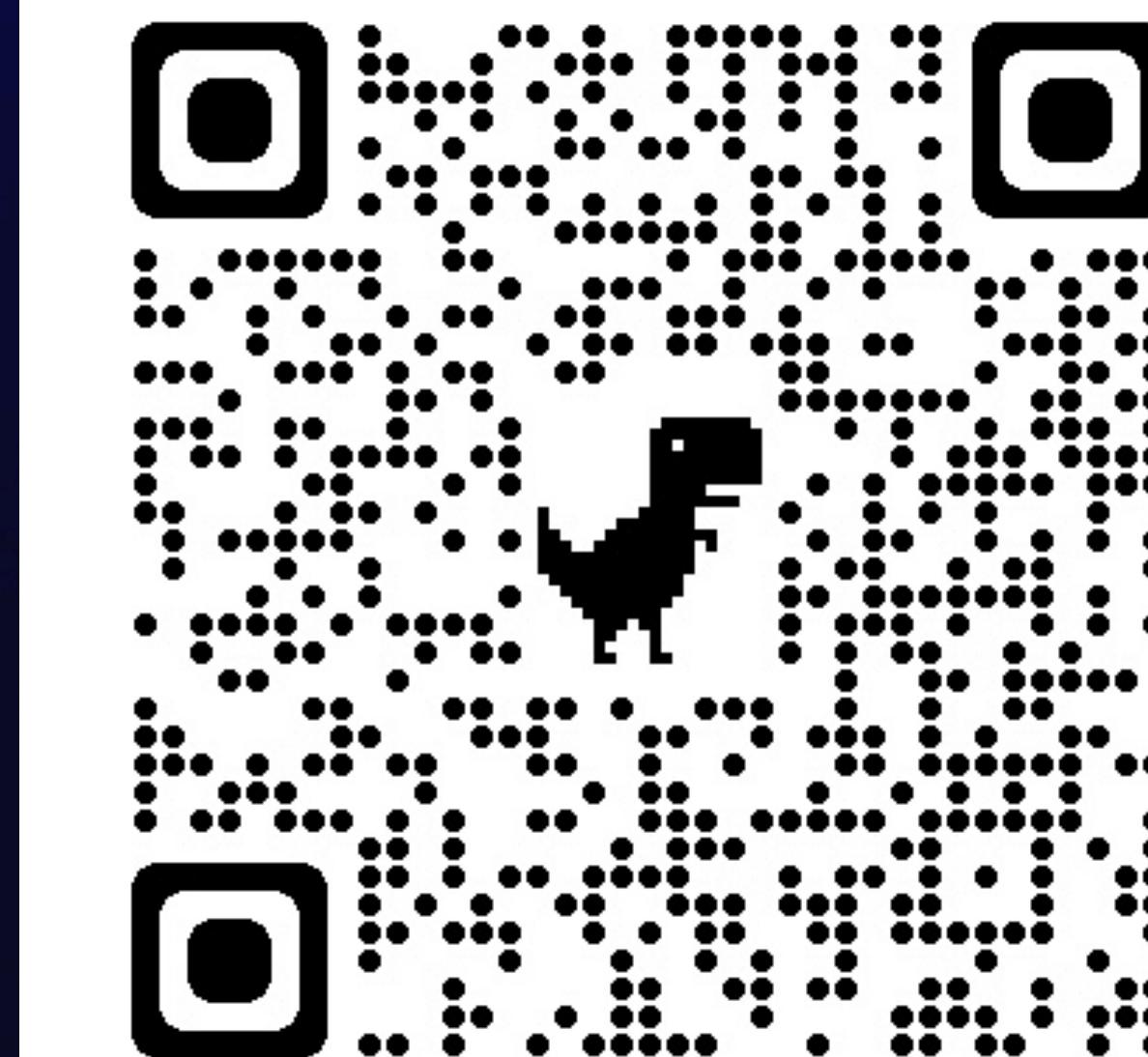
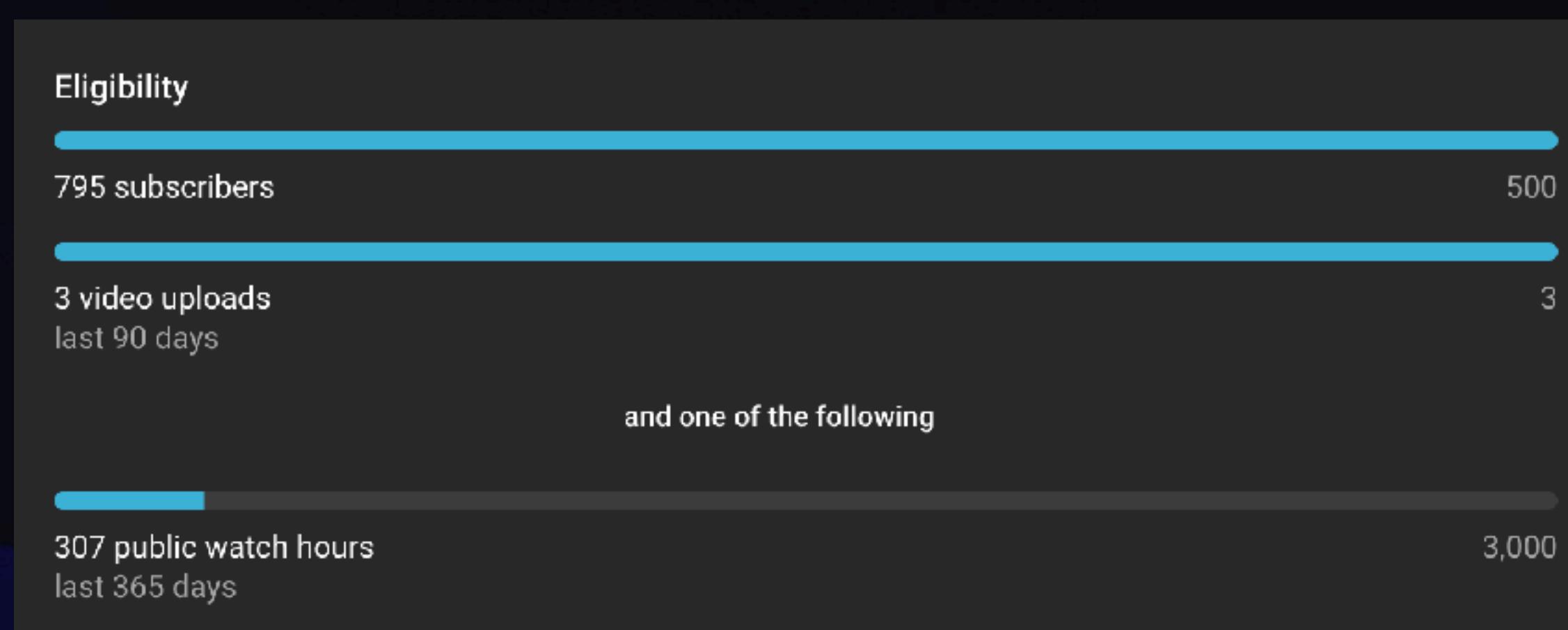


Shruti Kapoor
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The End