LLM fundamentals.

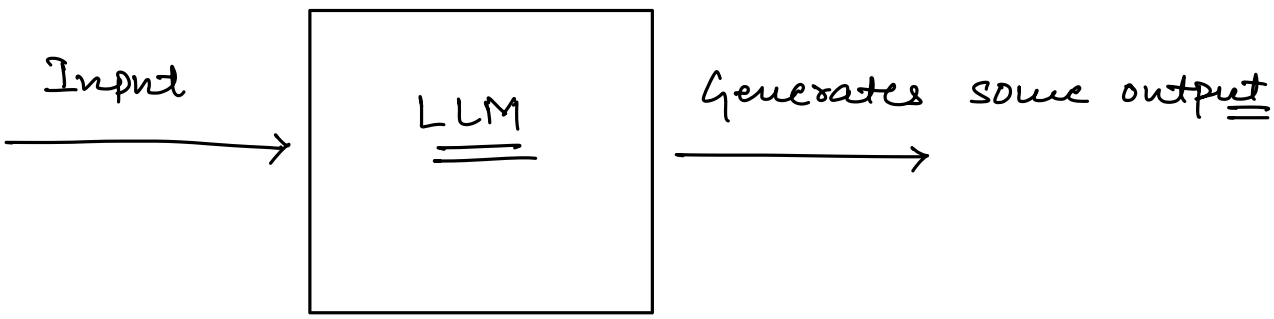
↳ Large language Models.

→ Tokenization

→ Pre-training

→ Context - Window

→ Parameters.

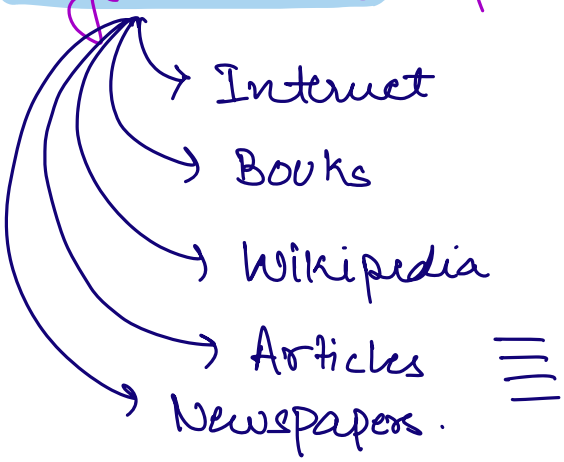


GPT.

↳ Generative Pre-trained Transformer.

Data Collection.

↳ Huge amount of Data.



Data filteration

Tokenization.

Computer works on Numbers.

Hey GPT, How are you?

↓ Tokenization

Token

↓

Word

Character

Subword.

I love Programming

↓ Tokenization

["I", "love", "Program", "ming"]

↓

Each token gets some numerical value.

a → 10
b → 79
c → 81
d → 13
e → 7
f → 17

"love"

Model Architecture (Transformers)

⇒ Attention Mechanism

↳ Importance of each word in a sentence.

Abhishek scored century against N2.

⇒ Right context about the sentence.

⇒ focus on more important words.

Training.

↳ Model is trained by predicting the next Token again & again.

⇒ Get the answers with high probability.

Fine Tuning

↳ Human Feedback

Parameters.

↳ Parameters are the numbers the model learns during training.

↳ Model memory or knowledge

Context Window.

⇒ Maximum amount of Text (tokens) an LLM can look at and remember at a time to understand user's query & answer appropriately.

⇒ Transformers : Next Class