Lect 14 # Hugging Face Pipelines

Pipeline (input → preprocessing → processing → output)

[are objects that abstract most of the complex tasks)

- offering a simple API dedicated to several tasks.
- can adjust according to your need

example :- chief Pizza

- we smartly
- way to use hugging face
  - ① Transformers
  - ② diffusers
  - ③ pipeline
- can use state of the model in few lines

⟹ Practical Example

1) Text Summarization (summarize the tasks)

2) Name Entity Recognition

is a NLP task.

involves identifying & classifying named entity in text into predefined categories

pipeline("ner")

- create & try to develop critical thinking "

PIL (Python Library for images)

③ Image Classification

(: png format)

pipeline ("model = " ")

Top 5 accuracy

④ Text-Image

:: stable diffusion

⑤ Translation Pipeline

(which translates one language to another)

pipeline ("translation_en_to_fr")

PyTorch, Tensor (matrices)

G matrix calculation

CUDA concept

(GPU support)

CPU ⇒ 8/16 ⇒ cores (processors)

GPU ⇒ Thousand g core (GPU)

Example y Math solve < matric / PHD (CPU)

CPU different language GPU different language

Torch/PyTorch

CUDA

(Translator)

(Main GPU)