Use of AI in eContent development

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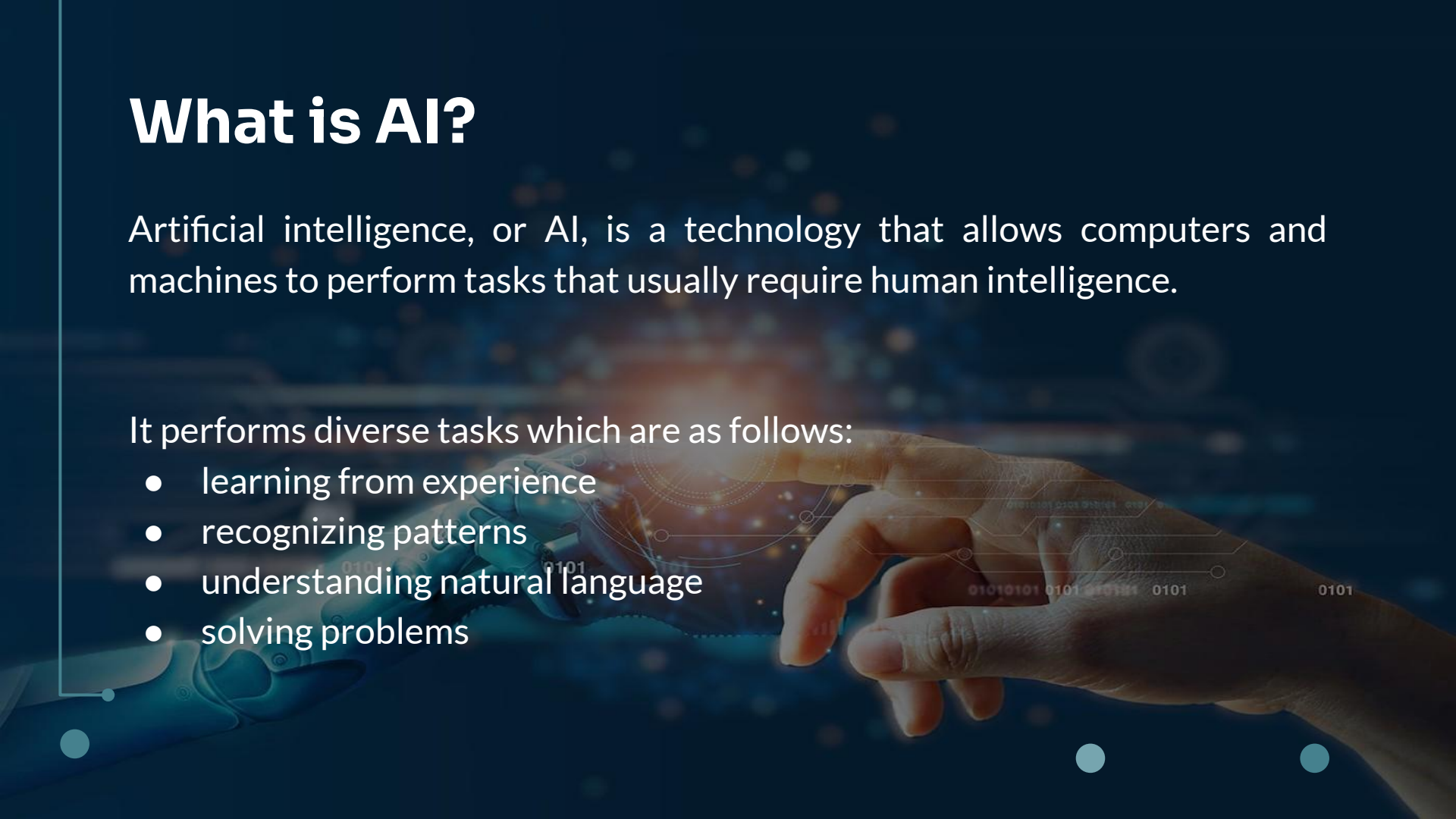
What is AI?

Artificial intelligence, or AI, is a technology that allows computers and machines to perform tasks that usually require human intelligence.

It performs diverse tasks which are as follows:

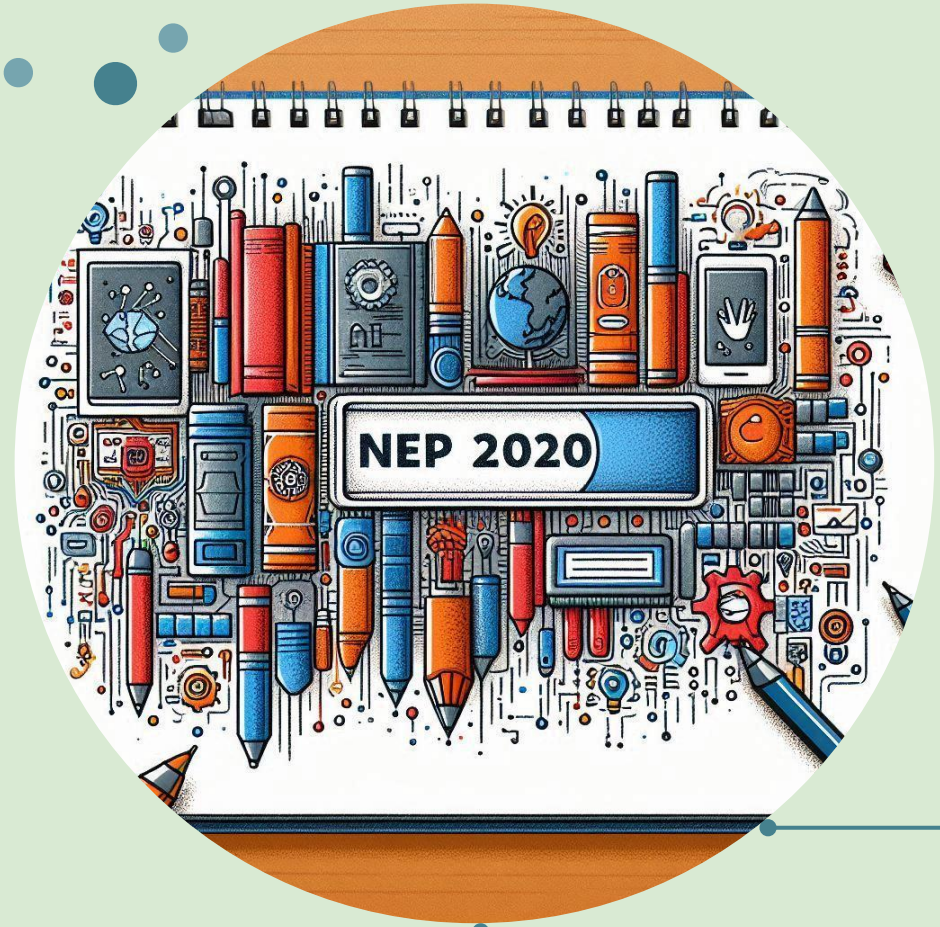
- learning from experience
- recognizing patterns
- understanding natural language
- solving problems



What is Generative AI?

Generative AI, also known as gen AI, is a type of AI that can create original content in response to a user's request. Generative AI can create text, images, video, audio and presentation.

What do NEP 2020 and NCFSE 2023 say about AI?



NEP 2020

As per the clause 23.2, Artificial intelligence will not just change what students learn in the classroom but how they learn.

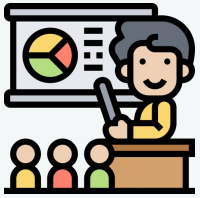
NCFSE 2023

As per the clause 6.1.1.1, there are enormous possibilities to use **Artificial Intelligence** to improve the teaching-learning and assessment processes, supporting Teacher preparation and professional development.

NCFSE 2023

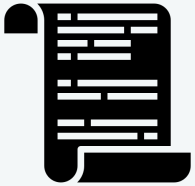
As per the clause 6.1.1.2, **Generative AI** has the potential to play a complementary role in learning by significantly reducing the time and effort involved in generating content — quizzes, lesson plans, learning materials, adaptive assessments, interactive simulations, and virtual environments for engaging learning.

Content types you'll be able to create using AI

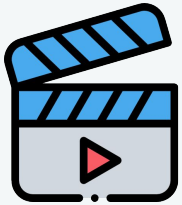


Presentation

Images



Scripts



Videos

Activities

Audio

Large Language Model (LLM)

- Large Language Model refers to a type of artificial intelligence model that is trained on vast amounts of text data to understand, generate, and manipulate human language.
- These models are designed to predict and generate text based on the patterns they learn from their training data, making them capable of performing various natural language processing tasks.

Examples of LLM	
Copilot	Chat GPT

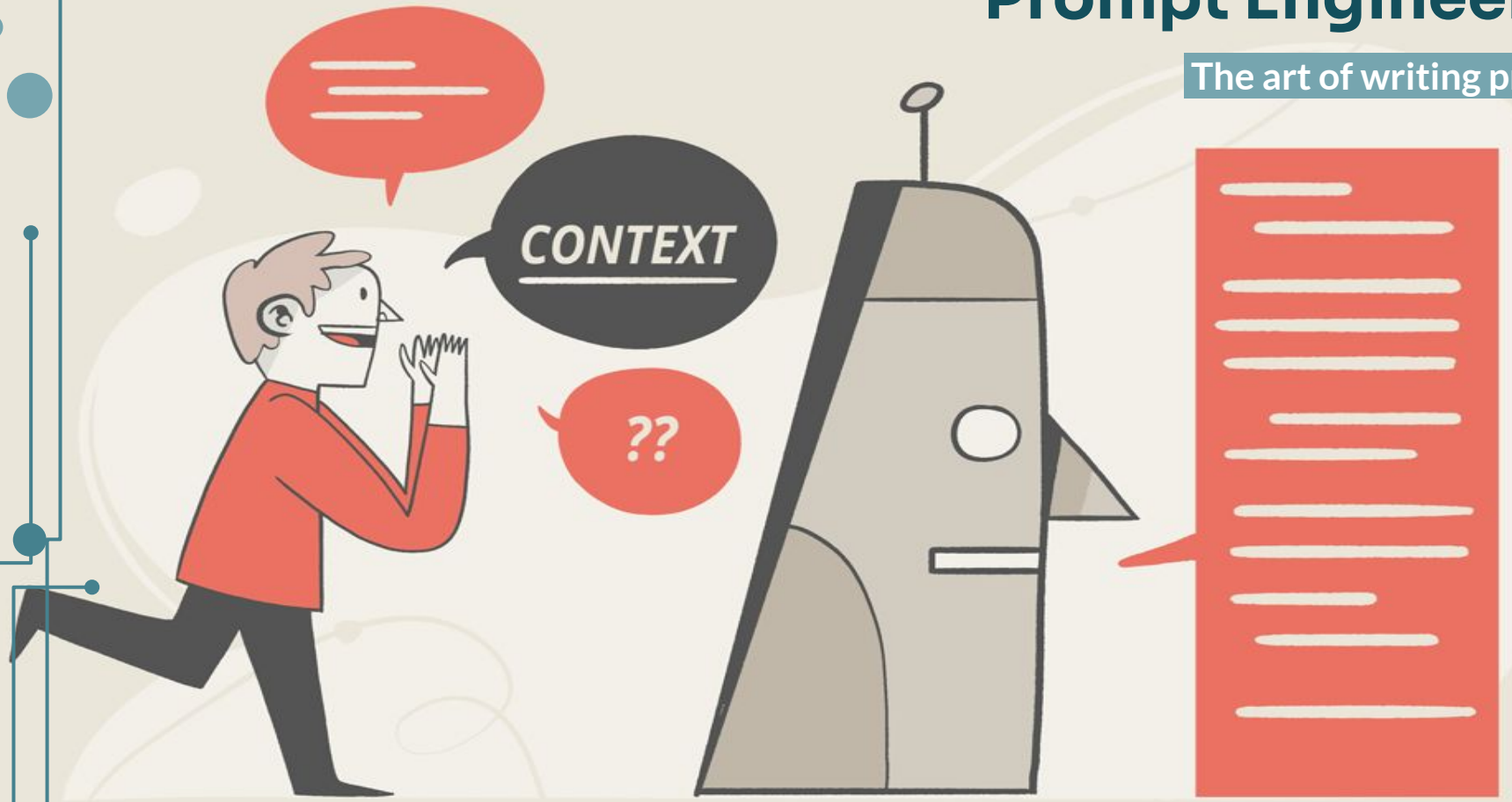
Generate Diverse Content

Diverse content can be generated from LLM. Some of the examples are given below:

Generate script	Get Ideas for activity based learning	Personalise the content
https://sl.bing.net/fz7TgHiZLtk	https://sl.bing.net/doA1CGrdZ4S	https://sl.bing.net/iZ6Eg79gg2u

Prompt Engineering

The art of writing prompts



Prompt engineering is the art and science of designing and optimizing prompts to guide AI models, particularly LLMs, towards generating the desired responses.

The effectiveness of your prompt directly influences the quality and relevance of the AI's output.

Scenario	Example Prompt
Creative Writing	"Write a short story about a young woman who discovers a magical portal in her attic."
Summarization	“Summarize the main points of the following news article on climate change."
Translation	"Translate the following text from English to Hindi: 'The quick brown fox jumps over the lazy dog.'"
Dialogue (simulate conversations)	"You are a friendly chatbot helping users troubleshoot their computer problems. Respond to the user's query: 'My computer won't turn on.'"
Multiple choice questions	Write 10 multiple choice questions with correct answers based on the topic electricity for NCERT class 10

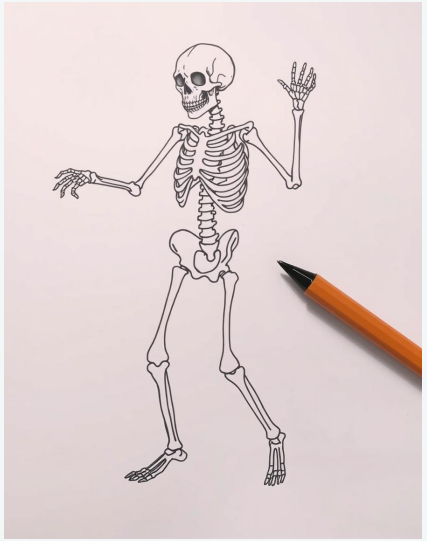
Example Prompts with responses from LLM

Tactic	Prompt Example
Define the desired length and format of the output	"Compose a 500-word essay discussing the impact of climate change on coastal communities."
Specify the target audience	"Explain the concept of machine learning in simple terms, suitable for a non-technical audience."
Include relevant facts and data	"Given that global temperatures have risen by 1 degree Celsius since the pre-industrial era, discuss the potential consequences for sea level rise."
Use precise language and avoid ambiguity	Instead of: "Write something about climate change," use: "Write a persuasive essay arguing for the implementation of stricter carbon emission regulations."
Quantify your requests whenever possible	Instead of: "Write a long poem," use: "Write a sonnet with 14 lines that explores themes of love and loss."

AI Tools for eContent development

Text to Image generation

https://www.adobe.com/in/express/
https://www.mage.space/
https://www.craiyon.com/



Exemplar Prompts-

1. Draw an image of a class with students of Indian origin sitting on benches kept one after another in rows and a teacher standing near a smart board.
2. Draw an image of a dancing human skeleton

Text to Audio generation

https://www.uberduck.ai/app/text-to-speech

Text- Artificial intelligence, or AI, is technology that enables computers and machines to simulate human intelligence and problem-solving capabilities.

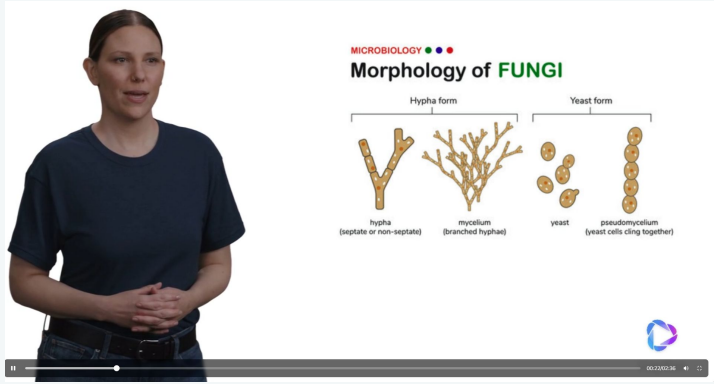
https://www.desivocal.com/

Text- Artificial intelligence (AI) makes it possible for machines to learn from experience, adjust to new inputs and perform human-like tasks.

Text to Video generation

https://app.heygen.com/

Demo video-
https://app.heygen.com/videos/b39de300af9149eb967f6f19b0a3b353?subType=undefined



https://app.steve.ai/

Demo video-
https://app.steve.ai/steveai/publish/xe-GbpEBk2MtsBxbzLtQ

Text to story videos generation

Create a story using an LLM such as copilot

Prompt- Write a very short story in english

STORY- The Lost Key

In a small, quiet town, there lived an elderly locksmith named Mr. Harris. One evening, as he was closing his shop, he found an old, rusty key on the floor. It was unlike any key he had ever seen.

Curious, Mr. Harris decided to find out what the key unlocked. He spent days searching the town, trying the key in every lock he could find, but none fit.

One day, while walking through the town's old cemetery, he noticed a forgotten mausoleum. The door had a peculiar lock that seemed to match the key. With a trembling hand, Mr. Harris inserted the key and turned it. The lock clicked open.

Inside, he found a dusty chest. Opening it, he discovered a collection of letters and photographs, revealing the story of a long-lost love between two people separated by war. The letters spoke of hope, dreams, and a promise to reunite.

Mr. Harris carefully preserved the letters and shared the story with the town. The tale of love and hope brought the community closer, reminding everyone of the power of enduring love.

Text to story videos generation (cont.)

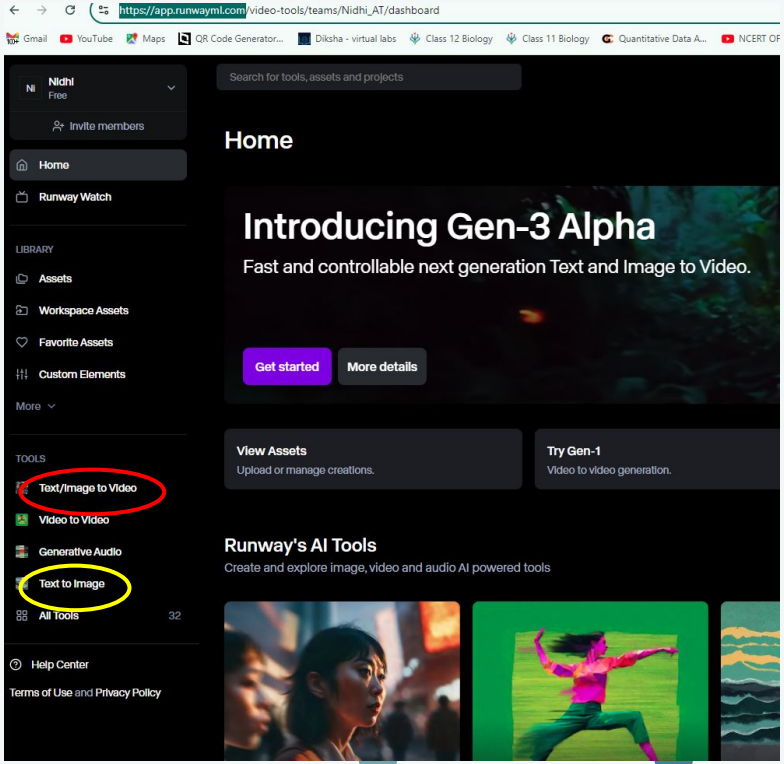
AI Tool- https://app.runwayml.com/

STEP 1- create images using “text to image” option highlighted with yellow colour. Download the suitable images

STEP 2- create video using “text/image to video” option highlighted with red colour.

- Upload downloaded images as asset.
- Explain the kind of animation required.
- Click on generate, a clip will be generated.
- Download the clipping.

STEP 3- put all the clippings in sequence in a video editor such as inshot and create a complete video.



Text to story videos generation (cont.)

Exemplar Prompts

Image 1- Draw an image of a locksmith. He is an old man with moustache and beard.

Animation 1-This man should move towards lock and key and hold them

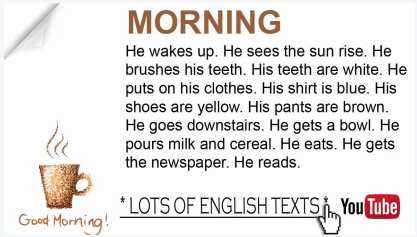
Image 2- Draw an illustration of an old man with moustache and beard who found an old, rusty key on the floor. He should be looking towards the key kept on the floor

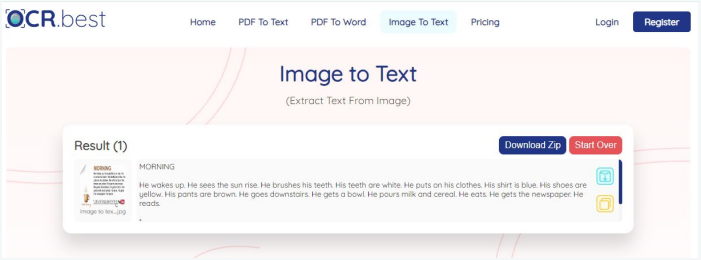
Animation 2- This man should be picking up key from the floor

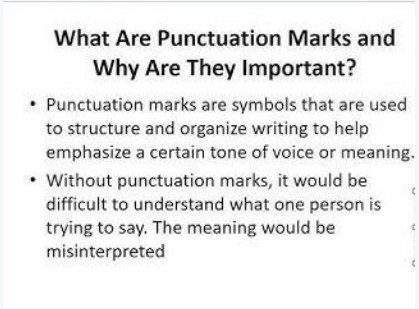
Image to Text generation

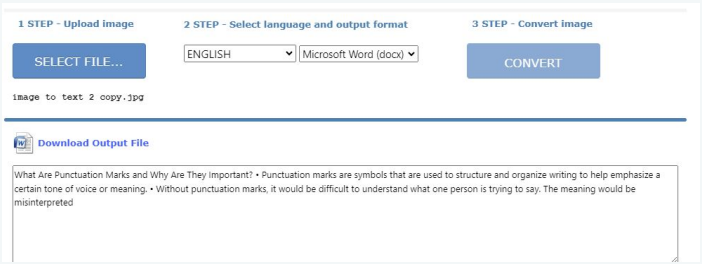
https://www.ocr.best/image-to-text

https://www.onlineocr.net/



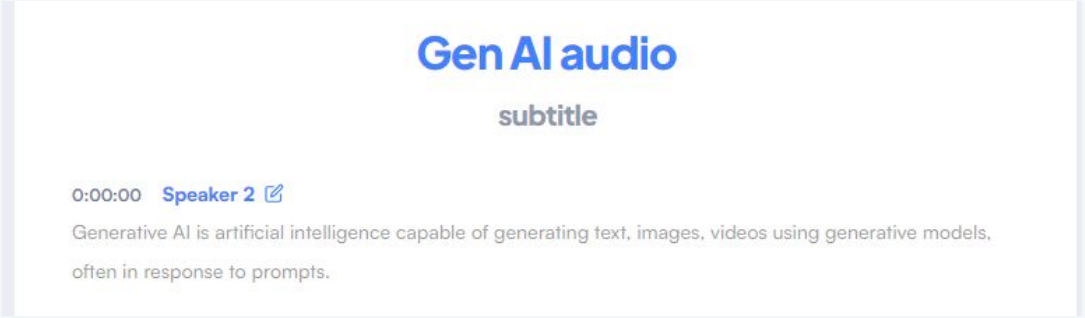




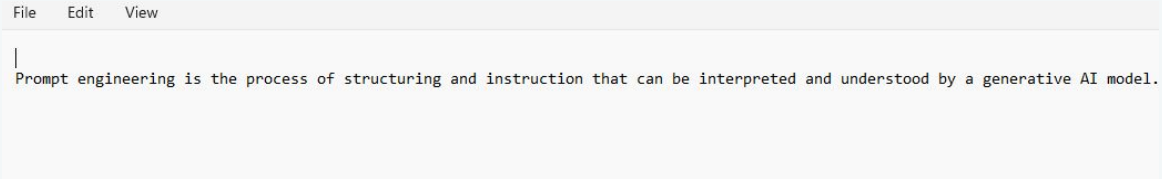


Audio to Text generation

https://maestra.ai/

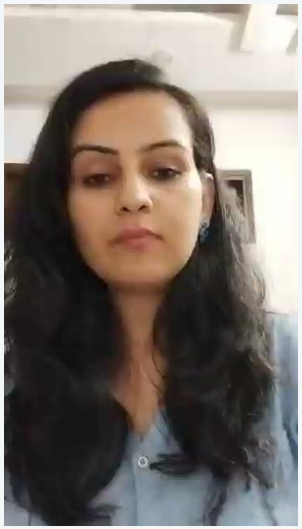


https://restream.io/tools/transcribe-audio-to-text



Video to Text generation

https://web.descript.com/



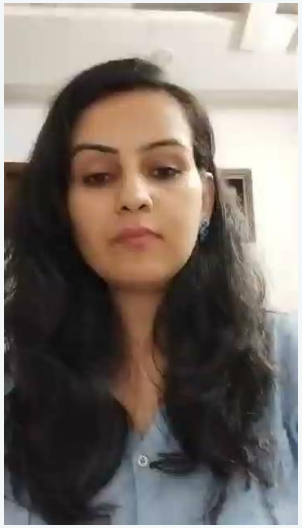
VID-20240823-WA0002

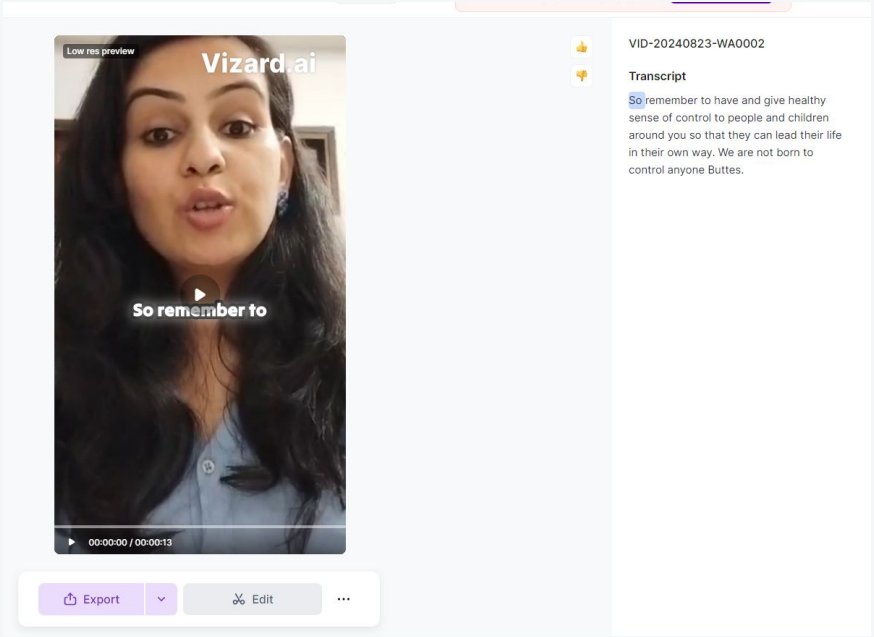
Add speaker

So remember to have and give healthy sense of control to people and children around you so that they can lead their life in their own way. We are not born to control anyone but ourselves.

Video to Text generation

https://vizard.ai/

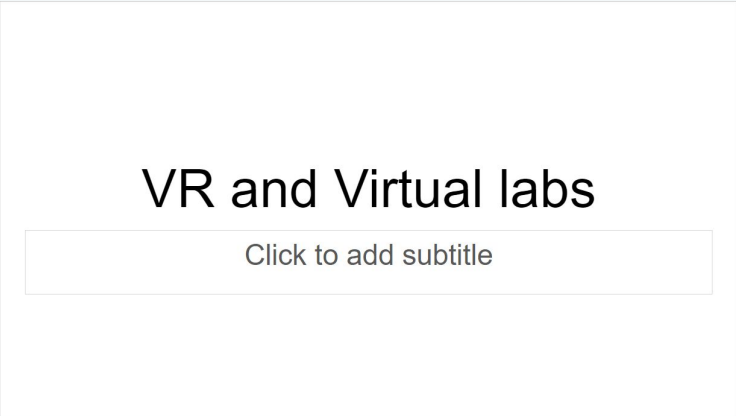




Text to Presentation

https://gamma.app/ai-powerpoint

- **For enhancing the existing presentation click on Import → AI Import**
- For generating new presentation click on Create New



Link of the content–
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Text to Presentation

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- For enhancing the existing presentation click on Import → AI Import
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Prompt-
create a presentation on Artificial Intelligence

Link of the content-

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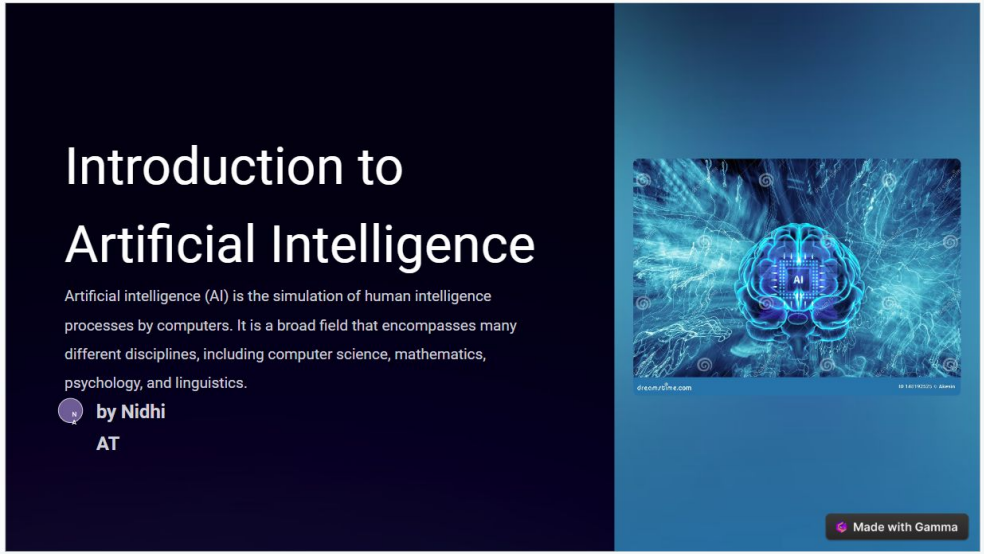


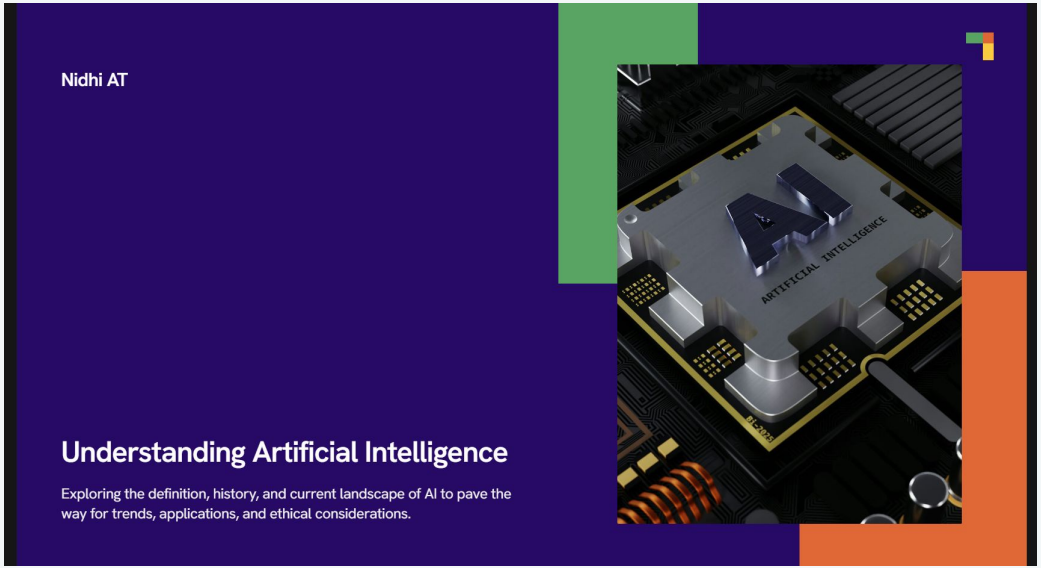
Text to Presentation

https://www.presentations.ai/

Prompt-
create a presentation on Artificial Intelligence

Link of the content-

https://app.presentations.ai/view/A1HOfk
https://app.presentations.ai/#/docs/edit/7122412



In this session we discussed following concepts:

- Artificial Intelligence and Gen AI
- NEP 2020 and NCFSE 2023 on AI
- Prompt Engineering
- Large Language Models (LLMs)
- AI Tools for eContent development

AI Tools for eContent development covered in this session

- Text to Image generation
- Text to Video generation
- Image to Text generation
- Video to Text generation
- Text to Audio generation
- Text to story video generation
- Audio to Text generation
- Text to Presentation

THANKS

Attribution

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