



Master in Planning and
Management of Tourism Systems



AI & Large Language Models

Nicola Cortesi

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is the branch of computer science that simulates human thought. A better name of AI is that of “Alien Thought”



ARTIFICIAL INTELLIGENCE

Analogy with flight:
airplanes can fly like
birds, but using a very
different technical
solution.

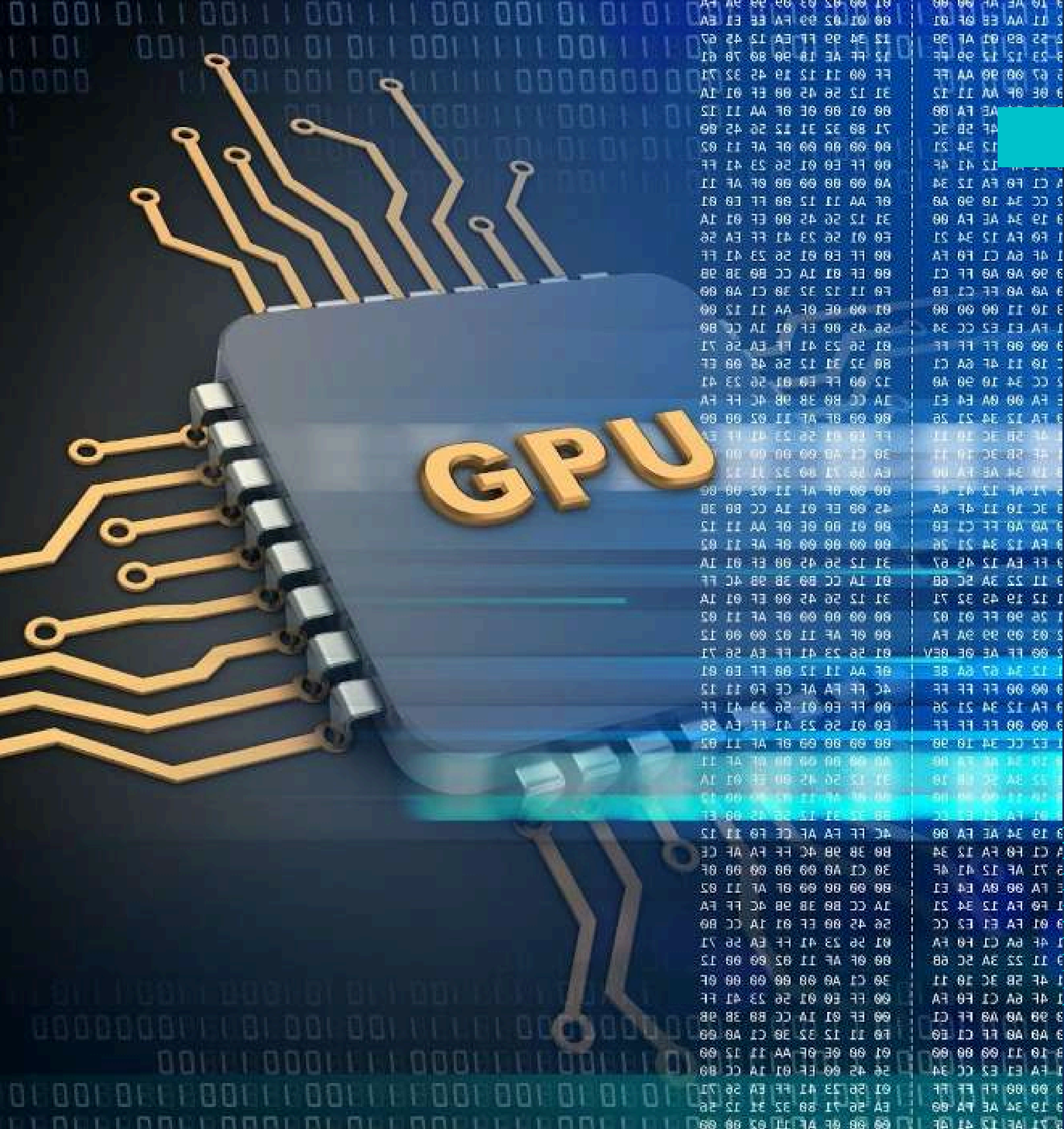


ARTIFICIAL INTELLIGENCE

Luckily for us, AI lacks humor, spontaneity, originality, empathy, innovation and real intelligence.

LARGE LANGUAGE MODELS

In 2022 AI did a big leap forward thanks to complex algorithms known Large Language Models (LLMs) that are able to exploit parallel computation of graphical processing units (GPUs).



GPT

Generative Pre-trained Transformer

ChatGPT is the acronym di **Generative Pre-trained Transformers**.

“Transformer” refers to an architecture designed to analyze data in a parallel way

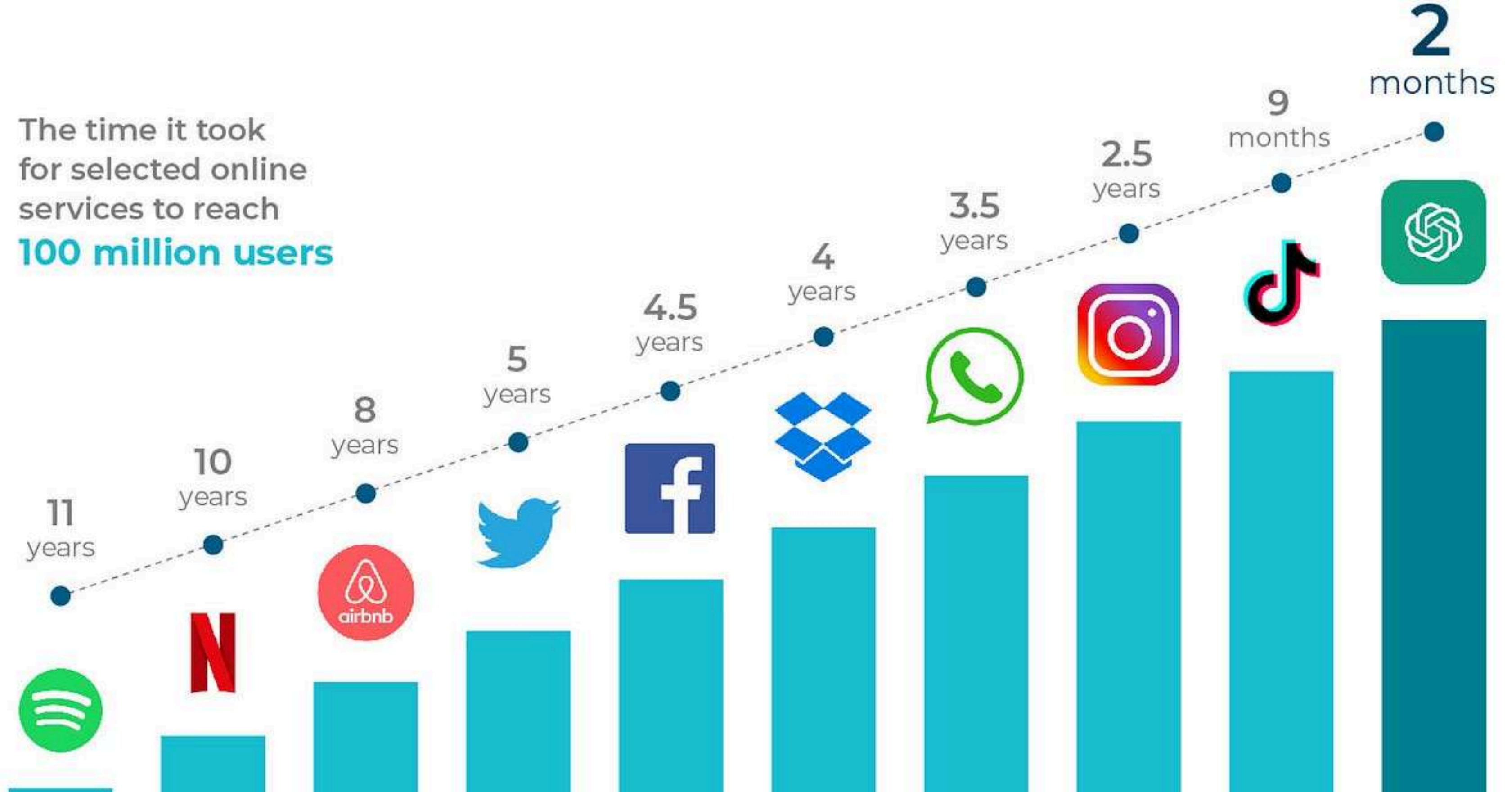
NEURAL PROCESSION UNIT

Next evolution of digital devices will include a **Neural Processing Unit (NPU)** beyond CPU and GPU

A close-up image of a dark blue integrated circuit (chip) mounted on a red and blue printed circuit board (PCB). The chip features a white icon of a brain with circuitry inside, and the letters "NPU" printed in large, white, bold font below it. The background shows various electronic components and traces on the PCB, including resistors labeled "R49R50R" and "C24", and capacitors labeled "C10" and "U7".

NPU

The time it took for selected online services to reach **100 million users**



ChatGPT is the application with the fastest grow in history: it gained 1 billion users in less than one year

EVOLUTION OF CHATGPT

Number of parameters:

ChatGPT-1: 117 millions

ChatGPT-2: 1.5 billions

ChatGPT-3: 175 billions

ChatGPT-4: 1.7 trillions

ChatGPT-5: first AI trained
by another AI (ChatGPT-4)



ChatGPT

Most famous LLMs in 2024:

- ChatGPT (OpenAI)
- Co-Pilot (Microsoft)
- Gemini (Google, ex Bard)
- LLama (Meta)
- Claude (Anthropic)
- DeepL (only translations)
- Italia (iGenius AI)
(<https://www.igenius.ai/it/language-models>)



Research

Products

Safety

Company



ChatGPT

Overview

Team

Enterprise

Pricing



ChatGPT

Get answers. Find inspiration. Be more productive.

Free to use. Easy to try. Just ask and ChatGPT can help with writing, learning, brainstorming, and more.

Start now ↗

Download the app >

Open ChatGPT from OpenAI's page:

<https://openai.com>





⚡ GPT-3.5

🔮 GPT-4

ChatGPT PLUS

+ New Chat



Today

📄 PDF File Assistance

📄 File Upload: Summarize Title

📄 Understanding Deep Learnin

📄 Summarized File Upload Req

📄 Connect Simple History Logs

📄 Define Hamlets and PNRR De

📄 Rimuovere sito da autocompl

📄 Newsletter Outline in Italian.

Previous 7 Days

📄 Fattura Proforma Generata

📄 CSV Meta Data Analysis

📄 Cleaned Email Addresses Ext

👤 Refer a friend

NEW

B

Business Apical



Open a new prompt

Old prompts

+: import your own data (.pdf, .txt, .doc, ...)

Prompt

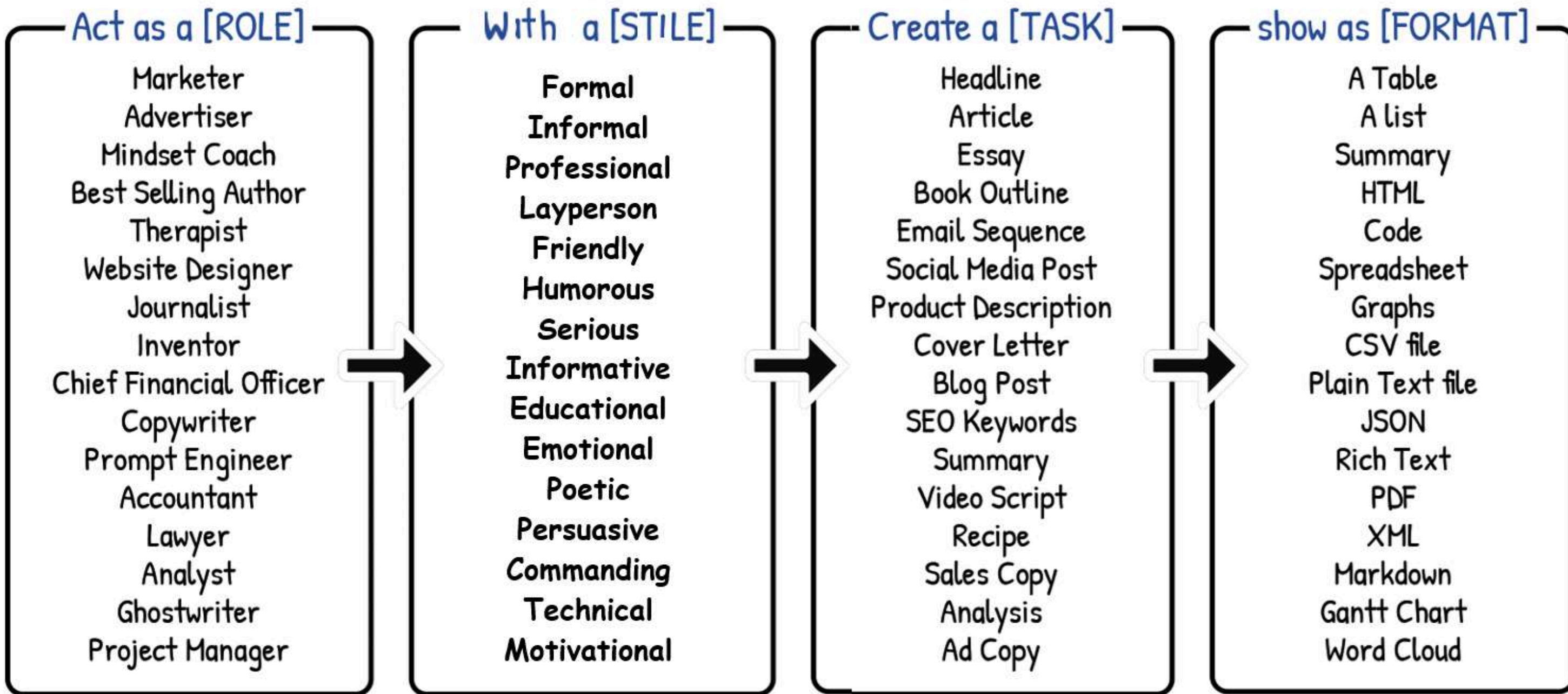
Write a spreadsheet formula to convert a date to the weekday

Tell me a fun fact about the Roman Empire

Come up with concepts for a retro-style arcade game

Help me study vocabulary for a college entrance exam

+ Send a message



The best prompt follow this optimal structure:

“You are a <...>. Write a < ... > [of X words] in a < ... > way [and save it as a <...>]”



ChatGPT PLUS

Prompt example: "You are a student of the master of PMTS. Write an email of 200 words to one of your master's professors asking in a formal way that you'd like to write your master thesis with him/her"

Now write it as a poem in the style of Dante Alighieri and starting each row with an "f"

ChatGPT is very useful for:

- help writing email/letters/posts/CV/slides/discourses/poetries/songs/stories/books/...
- summarize text (e.g: in 500 words o characters), e.g: articles or even videos (NoteGPT)
- expand text, adding more details
- suggest names or titles (e.g: 20 titles for a thesis on AI on tourism)
- correct grammatical errors
- improve sentences, using the same expressiveness of a mothertongue and the same competence of an expert in that field
- change the text format (e.g: create tweets from an article or lg posts)
- translate text in (almost) every language (even with voice)
- write and/or debug code in any language
- improved web searches (e.g: tell me about the master in PMTS)
- answer questions (for difficult ones, use Perplexity AI to avoid "allucinations")
- create images (better to use Leonardo AI or Midjourney)
- version 4o can also try to solve logical/mathematical/scientific problems

CHATGPT MAIN LIMITATIONS

- “Allucinations”
- ChatGPT-4 remembers previous conversations and prompts (context window) up to **1500 text pages** (120'000 tokens)
- Maximum prompt length is of **4096 characters** (about 500 words), plus eventual input pdf/documents/images
- Maximum length of an answer is about **500 pages**, but in practice it tends to provide shorter answers. To increase them, **split it in more parts**

AI DETECTORS

More than an AI detector Preserve What's Human

Since inventing AI detection, GPTZero incorporates the latest research in detecting ChatGPT, GPT4, Google-Gemini, LLaMa, and new AI models, and investigating their sources.



[CREATE FREE ACCOUNT →](#)

Each master thesis is scanned for detecting the use of AI in writing it

PROJECT WORK: ONLINE TRAVEL COMMUNITY



New tasks:

- Insert your name in bold in the fb travel community sheet if you are from the same city/region of your group
- Look for all english fb groups similar to yours in the fb group search bar and insert their names in columns I-J-K-... along with the number of members
- Publish a post and share it on the other similar fb groups. Use Leonardo AI to generate images of the city/region for the post.



Search Facebook



FB GROUP SEARCH BAR

Smart Trekkers
Public group · 4.0K members

Chats **Manage 3**

Community home

Overview

Admin tools

Admin Assist
7 actions, 10 criteria

Badge requests
0 new today

Pending approvals
0 new today

Potential spam
0 new today 3

Scheduled posts

Activity log

Group rules

Member-reported content

+ Create a Chat

Group by Smart Trekkers

Smart Trekkers

Public group · 4.0K members



Discussion Featured Events Media Files People



Write something...



Anonymous post



Photo/video



Poll

Featured ⓘ

Add ^



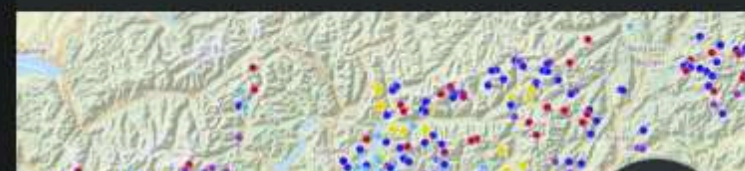
Nicola Cortesi
29 May 2021

Alcuni rifugi non solo hanno la banda larga...



Nicola Cortesi
31 May 2021

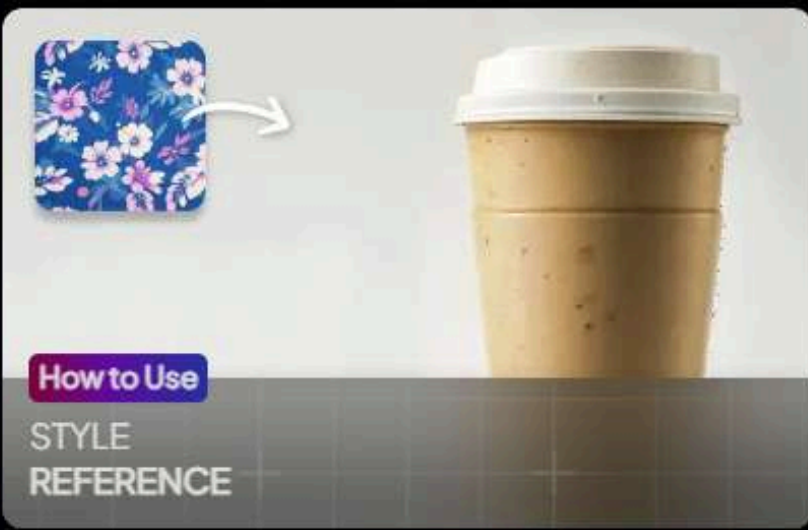
Mappa online rifugi e strutture mo...



TEXT2IMAGE AI TOOLS



Featured Guides



Community Creations

Trending All Upscaled Motion All Photo



- Leonardo AI (10 images)
- Midjourney [\$]
- DALL-E (ChatGPT)
- Firefly (Adobe)[\$]
- NightCafe (4 images)



a realistic view of the city of Barcelona

LEONARDO AI

Image prompt: "a realistic view of the city/region of..."

You are currently on a free plan. Upgrade for priority generations, additional token credits, and more.

a realistic view of the city of Barcelona



Preset
Cinematic Kino

Preset Style
Cinematic

Contrast
Medium

Generation Mode
Fast Quality

Image Dimensions
2:3 1:1 16:9 More

Small 1184x664 Medium 1280x720 Large 1368x768

Number of Images
1 2 3 4

Private Mode

Advanced Settings

Reset to Defaults

Facebook search bar and navigation icons (Home, Video, Marketplace, Profile, +).

Smart Trekkers
Public group · 4.0K members

Chats **Manage 3**

Community home
Overview

Admin tools

- Admin Assist (7 actions, 10 criteria)
- Badge requests (0 new today)
- Pending approvals (0 new today)
- Potential spam (0 new today)
- Scheduled posts
- Activity log
- Group rules
- Member-reported content

+ Create a Chat

Group by Smart Trekkers

Smart Trekkers

Public group · 4.0K members


Discussion | Featured | Events | Media | Files | People

Write something...

Anonymous post | Photo/video | Poll

Featured

- Nicola Cortesi (29 May 2021): Alcuni rifugi non solo hanno la banda larga...
- Nicola Cortesi (31 May 2021): Mappa online rifugi e strutture mo...



Publish a post like this: "This is how AI simulates a view of the city/region of ... Do you notice any difference from the real one?" share it with other groups

PROJECT WORK #2: AI TOOLS FOR SOCIAL MEDIA



CANVA

Canva is an online tool for presentations that is also able to create simple videos

+ Create a design
Try Pro for 30 days

Projects > Shorts > ITA

ITA ☆

Search folder

Name ↑

Shorts part 01 (#1-48) ITA

Shorts part 02 (#49-96) ITA

Shorts part 03 (#97-143) ITA

Shorts part 04 (#144-183) ITA

Shorts part 05 (#184-221) ITA

Shorts part 06 (#222-258) ITA

Shorts part 07 (#259-295) ITA

Shorts part 08 (#296-332) ITA

Shorts part 09 (#333-369) ITA

Shorts part 10 (#370-399) ITA

Shorts part 11 (#400-439) ITA

Shorts part 12 (#440-479) ITA

Shorts part 13 (#480-519) ITA

Shorts part 14 (#520-559) ITA

Shorts part 15 (#560-599) ITA

Shorts part 16 (#600-639) ITA

Shorts part 17 (#640-679) ITA

Shorts part 18 (#680-719) ITA

- Shorts part 01 (#1-48...)
- Shorts part 02 (#49-9...)
- Shorts part 03 (#97-1...)
- Shorts part 04 (#144-...)
- Shorts part 05 (#184-...)
- Shorts part 06 (#222-...)
- Shorts part 07 (#259-...)
- Shorts part 08 (#296-...)
- Shorts part 09 (#333-...)
- Shorts part 10 (#370-...)
- Shorts part 11 (#400-...)
- Trash

+ Create a design

Try Pro for 30 days

Recent designs

- Shorts part 12 (#440-4...
- Shorts part 10 (#370-3...
- Shorts part 11 (#400-4...
- Shorts part 10 (#370-3...
- Shorts part 12 (#440-4...
- Shorts part 11 (#400-4...

See all

Trash

File

Try Pro for 30 days

6:23

UNIVERSITAS SINDHUM BERGOMENIS

TRAVELER,
THERE IS NO PATH,
THE PATH IS MADE
BY WALKING

MARGARET WEIS

- TRAVELER, THERE IS NO PATH, THE PATH IS MADE BY WALKING
- THE MOST IMPORTANT MOMENT OF OUR JOURNEY IS WHEN WE THROW AWAY THE MAP
- DISTANCE DOESN'T MATTER. THE FIRST STEP IS THE HARDEST
- WHAT WE DO IN LIFE, ECHOES IN ETERNITY
- EVERY JOURNEY IS A CONTEMPLATION IN MOTION
- WHEN THE ROAD DOESN'T EXIST, INVENT IT!
- THERE IS A DIFFERENCE BETWEEN KNOWING THE PATH AND WALKING THE PATH
- FIND THE ACTIVITY YOU ENJOY AND YOU WILL NEVER HAVE TO WORK
- THE WAY THAT CAN BE NAMED IS NOT THE WAY
- IT TAKES A LOT OF EFFORT TO SEE WHAT'S UNDER YOUR NOSE
- PEOPLE DON'T TAKE TRIPS: TRIPS TAKE PEOPLE
- WHEN STOP D... ALL TRE... COME

Duration

Page 1 / 48

24%



File

Resize

Editing



Shorts part 01 (#1-48) ITA

Try Pro for 30 days



Design



Elements



Text



Brand



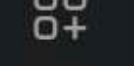
Uploads



Draw



Projects



Apps

Edit menu

Audio tracks



- 1 TRAVELER, THERE IS NO PATH, THE PATH IS MADE BY WALKING
- 2 THE MOST IMPORTANT MOMENT OF OUR JOURNEY IS WHEN WE THROW AWAY THE MAP
- 3 DISTANCE DOESN'T MATTER, THE FIRST STEP IS THE HARDEST
- 4 IN ETERNITY
- 5 EVERY JOURNEY IS A CONTEMPLATION IN MOTION
- 6 WHEN THE ROAD DOESN'T EXIST, INVENT IT!
- 7 THERE IS A DIFFERENCE BETWEEN KNOWING THE PATH AND WALKING THE PATH
- 8 FIND THE ACTIVITY YOU ENJOY AND YOU WILL NEVER HAVE TO WORK
- 9 THE WAY THAT CAN BE NAMED IS NOT THE WAY
- 10 IT TAKES A LOT OF EFFORT TO SEE WHAT'S UNDER YOUR NOSE
- 11 PEOPLE DON'T TAKE TRIPS: TRIPS TAKE PEOPLE
- 12 WHEN A BEING STOP DESIRING, ALL TREASURES COME TO HIM
- 13 THERE IS GREAT DISORDER UNDER HEAVEN AND ON EARTH, AND THE SITUATION IS EXCELLENT
- 14 HUMAN RACE WILL DIE OF CIVILIZATION

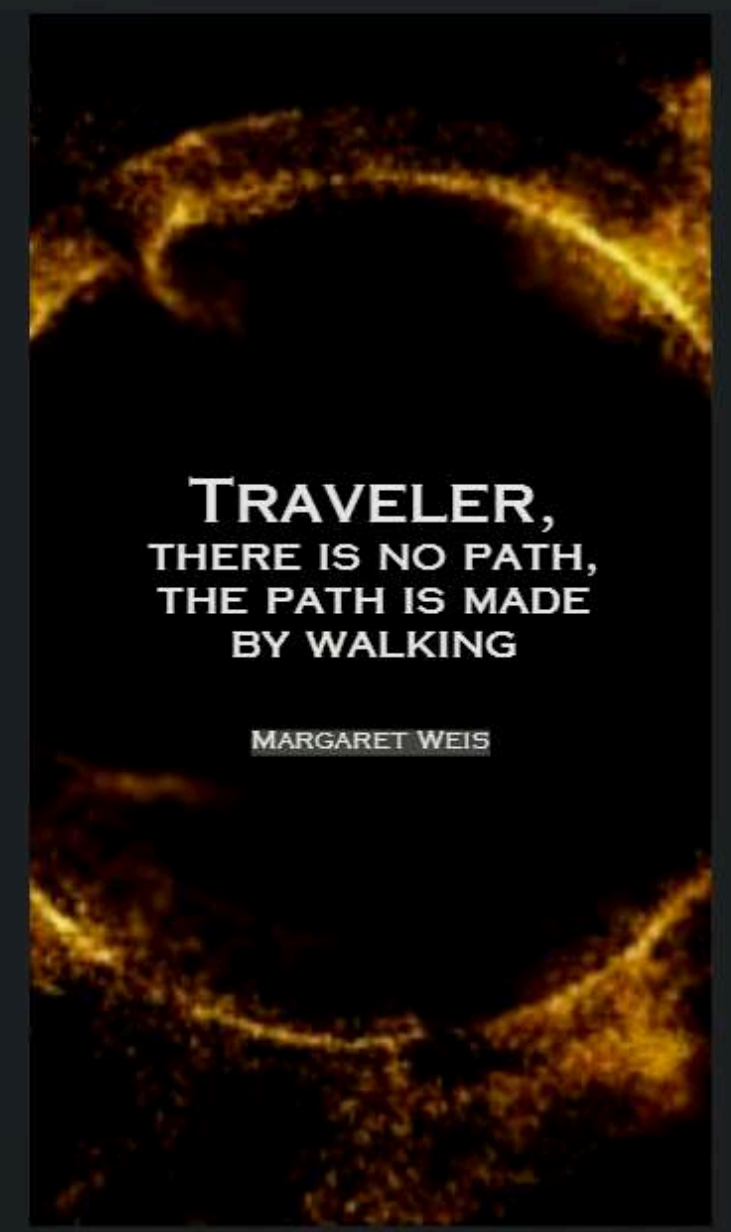
Notes

Duration



- Design
- Elements
- Text
- Brand
- Uploads
- Draw
- Projects
- Apps

Adjust Fade Beat Sync



Background music

Audio tracks

Timeline with 13 numbered segments and audio waveforms below.





Design

Elements

Text

Brand

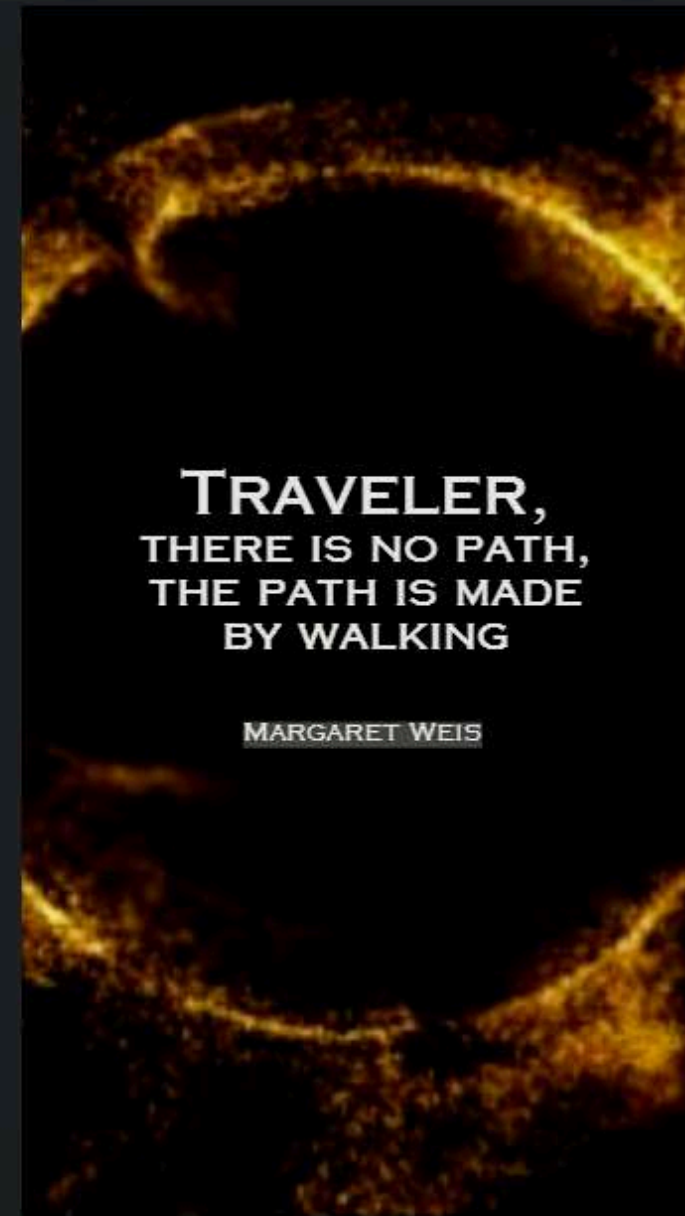
Uploads

Draw

Projects

Apps

Delete all audio tracks but the purple one at the top



- 1 TRAVELER, THERE IS NO PATH, THE PATH IS MADE BY WALKING
- 2 THE MOST IMPORTANT MOMENT OF OUR JOURNEY IS WHEN WE THROW AWAY THE MAP
- 3 DISTANCE DOESN'T MATTER, THE FIRST STEP IS THE HARDEST
- 4 AT WHAT WE FEEL WE CAN LIVE WITH
- 5 EVERY JOURNEY IS A CONTEMPLATION IN MOTION
- 6 WHEN THE ROAD DOESN'T EXIST, INVENT IT!
- 7 THE DIFFERENCE BETWEEN KNOWING THE PATH AND WALKING IS THE PATH
- 8 FIND THE ACTIVITY YOU ENJOY AND YOU WILL NEVER HAVE TO WORK
- 9 THE WAY THAT CAN BE NAMED IS NOT THE WAY
- 10 IT TAKES A LOT OF EFFORT TO SEE WHAT'S UNDER YOUR NOSE
- 11 PEOPLE DON'T TAKE TRIPS, TRIPS TAKE PEOPLE
- 12 WHEN A BEING STOP DESIRING, ALL TREASURES COME TO HIM
- 13 DISCOVER UNDER HEAVEN AND ON EARTH, AND THE SITUATION IS EXCELLENT



Timeline showing multiple audio tracks. The first track is highlighted with a red circle and labeled '5.2s'. Other tracks are shown in various colors (green, blue, red, purple, yellow).



File

Resize

Editing

Shorts part 01 (#1-48) ITA

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n +



Add page title

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Duplicate page Ctrl+D

Delete page DELETE

Hide page

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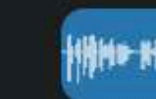
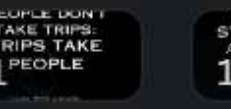
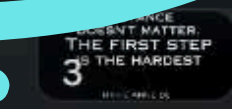
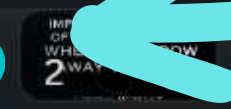
Add transition

Copy page style

Notes



Change the slide title: each slide should have the same number of the TikTok citation



Notes

Duration

Page 1 / 48

IT for Tourism Services – Master in PMTS



Design



Elements



Text



Brand



Uploads



Draw



Projects



Apps

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Duplicate page Ctrl+D

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Hide page

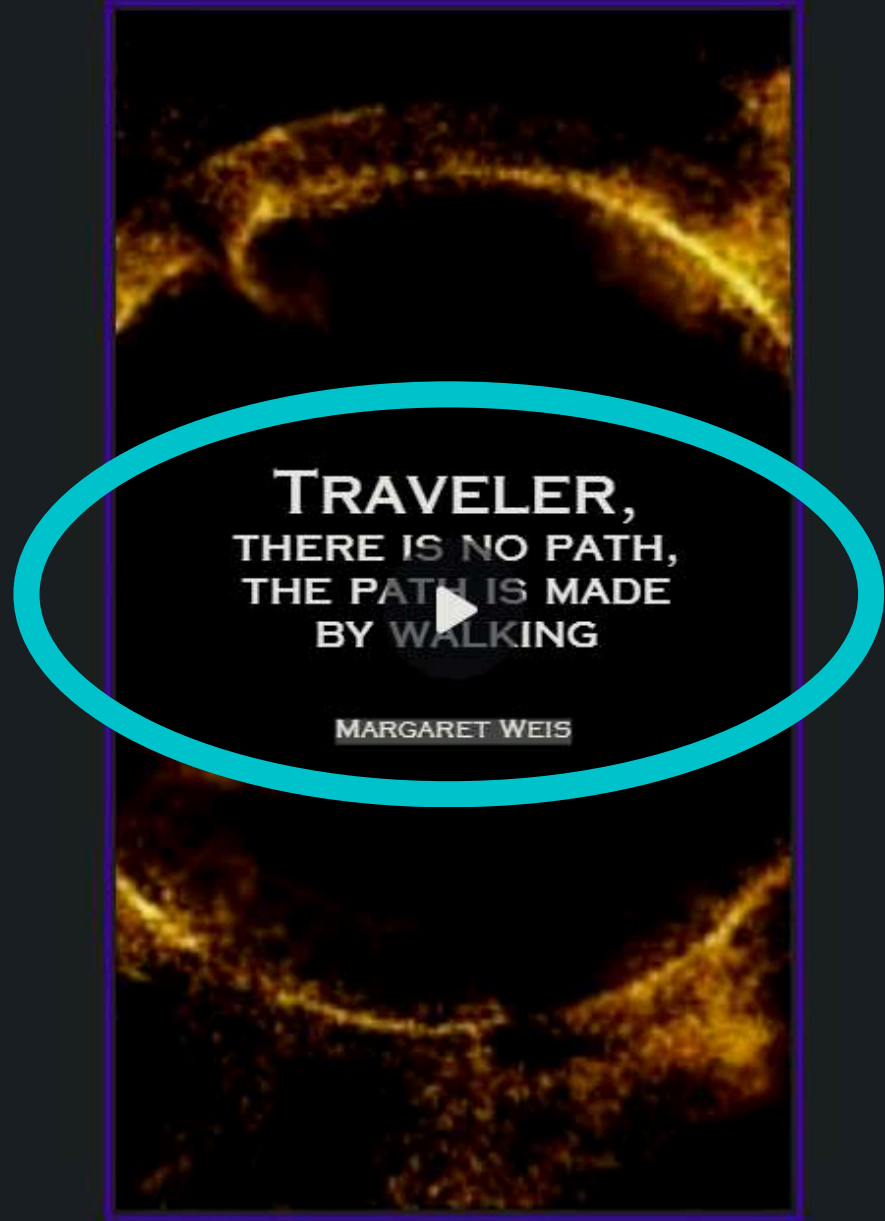
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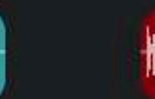
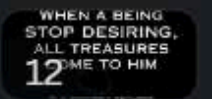
Add transition

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Notes



When all slide numbers've been modified, replace each citation with the italian citation with the the same TikTok number of the slide





Design



Elements



Text



Brand



Uploads



Draw



Projects

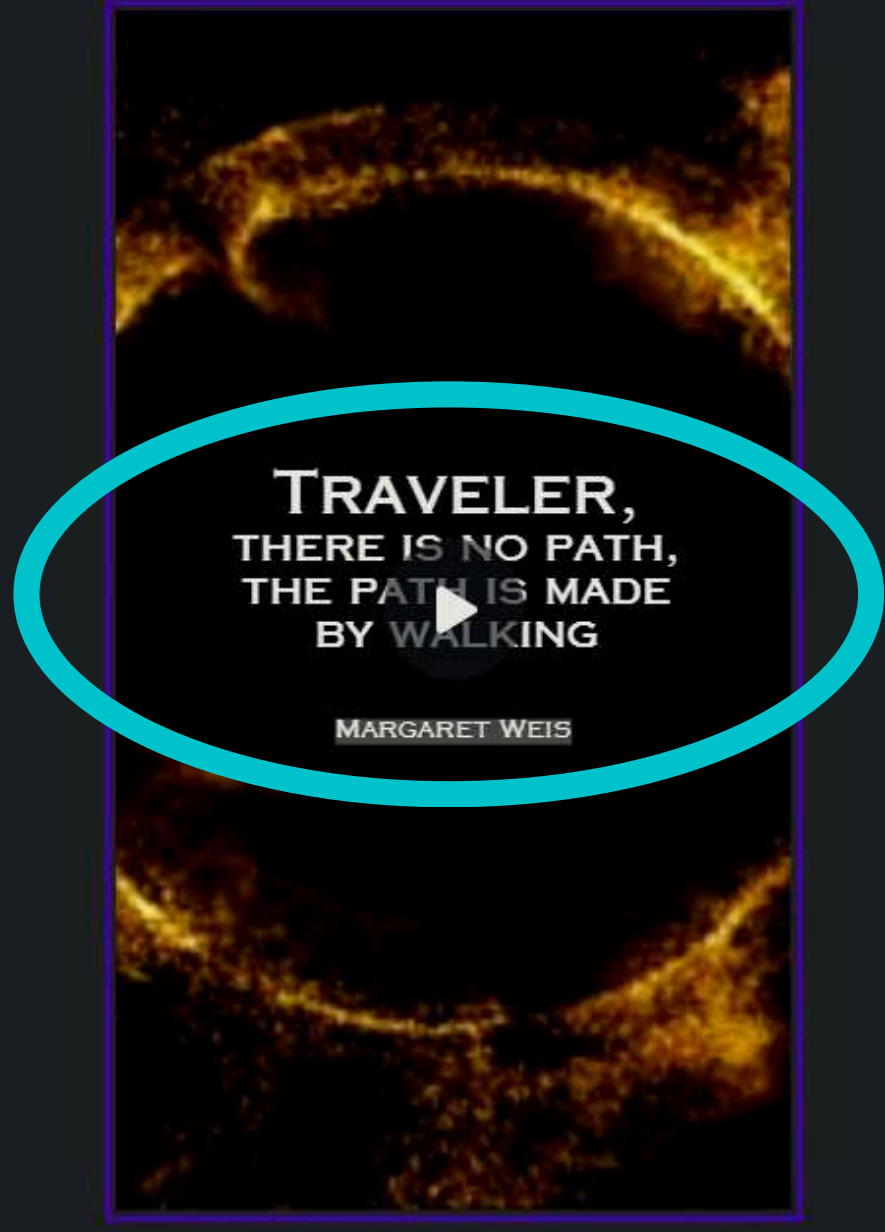


Apps



Add page title

- Add page Ctrl+Enter
- Duplicate page Ctrl+D
- Delete page DELETE
- Hide page
- Lock page Alt+Shift+L
- Copy link to page
- Add transition
- Copy page style
- Notes



Keep the same font size (45) and type (Copperplate Gothic)

- 1 TRAVELER, THERE IS NO PATH, THE PATH IS MADE BY WALKING BY MARGARET WEIS
- 2 THE MOST IMPORTANT MOMENT OF OUR JOURNEY IS WHEN WE THROW AWAY THE MAP
- 3 DISTANCE DOESN'T MATTER, THE FIRST STEP IS THE HARDEST
- 4 WHAT WE DO IN LIFE, ECHOES IN ETERNITY
- 5 EVERY JOURNEY IS A CONTEMPLATION IN MOTION
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- 13 DISORDER UNDER HEAVEN AND ON EARTH, AND THE SITUATION IS EXCELLENT





Design



Elements



Text



Brand



Uploads



Draw



Projects



Apps

Add page title

Add page Ctrl+Enter

Duplicate page Ctrl+D

Delete page DELETE

Hide page

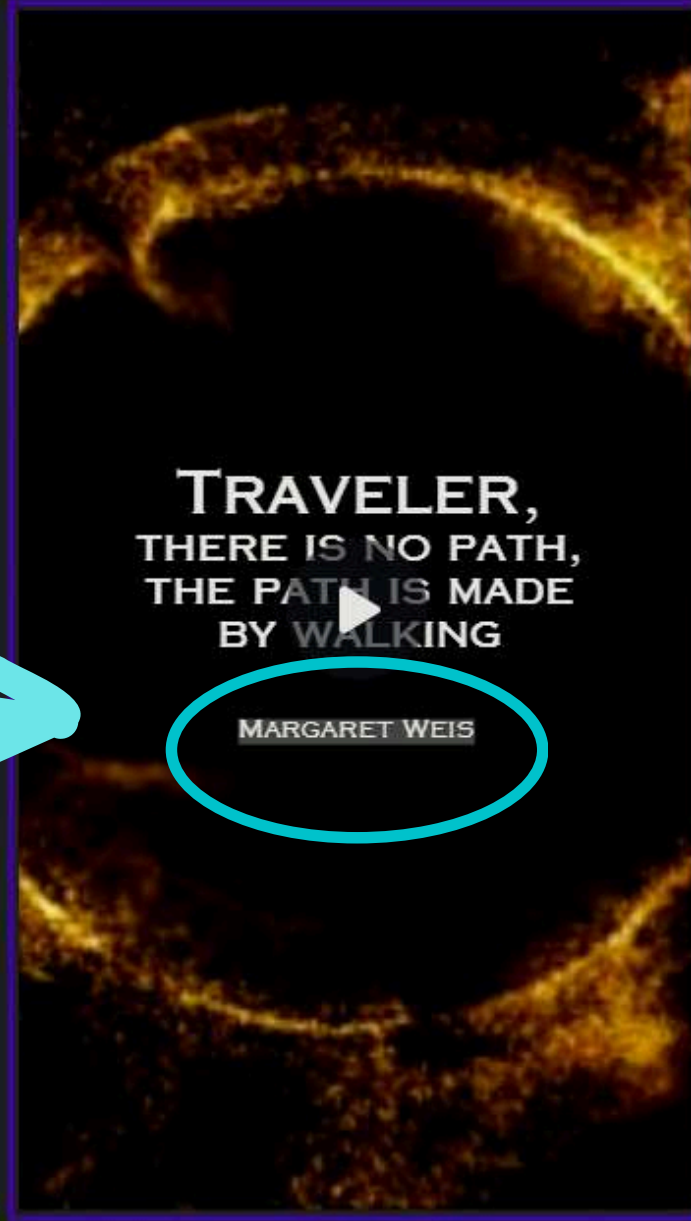
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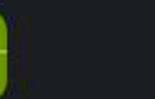
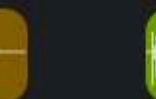
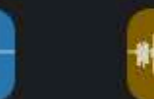
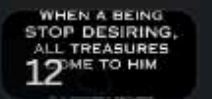
Add transition

Copy page style

Notes



Copy and paste the author name too





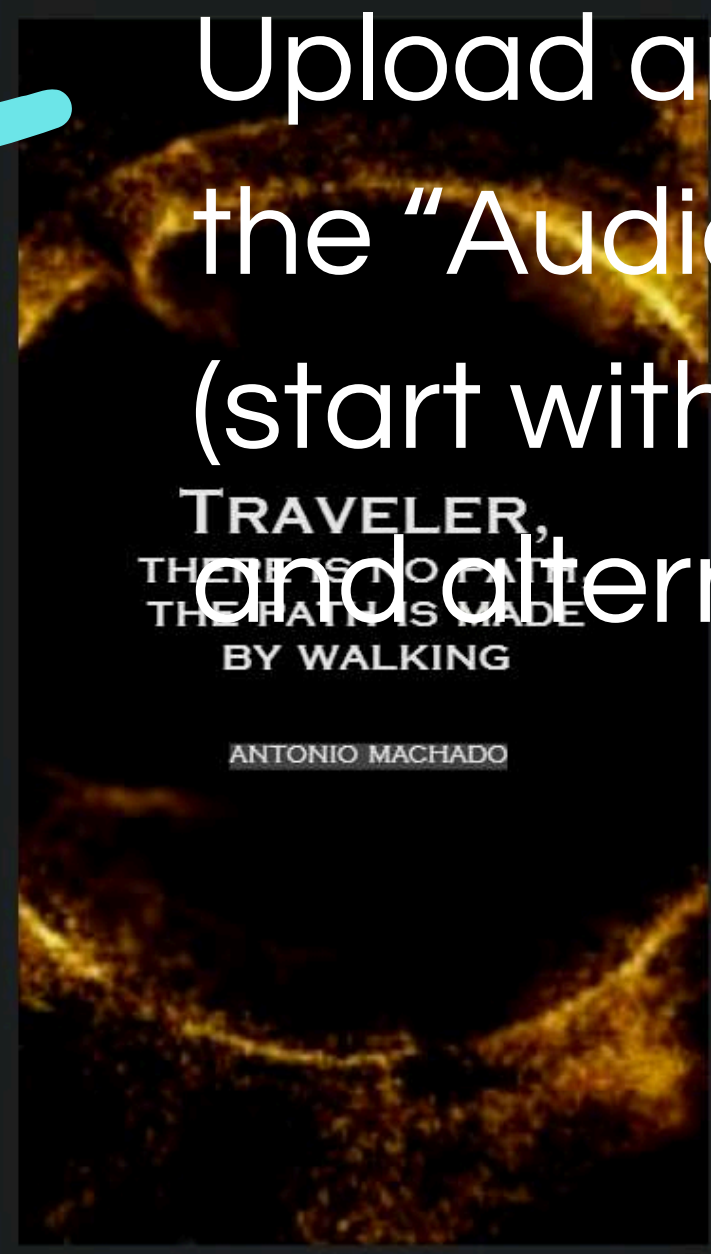
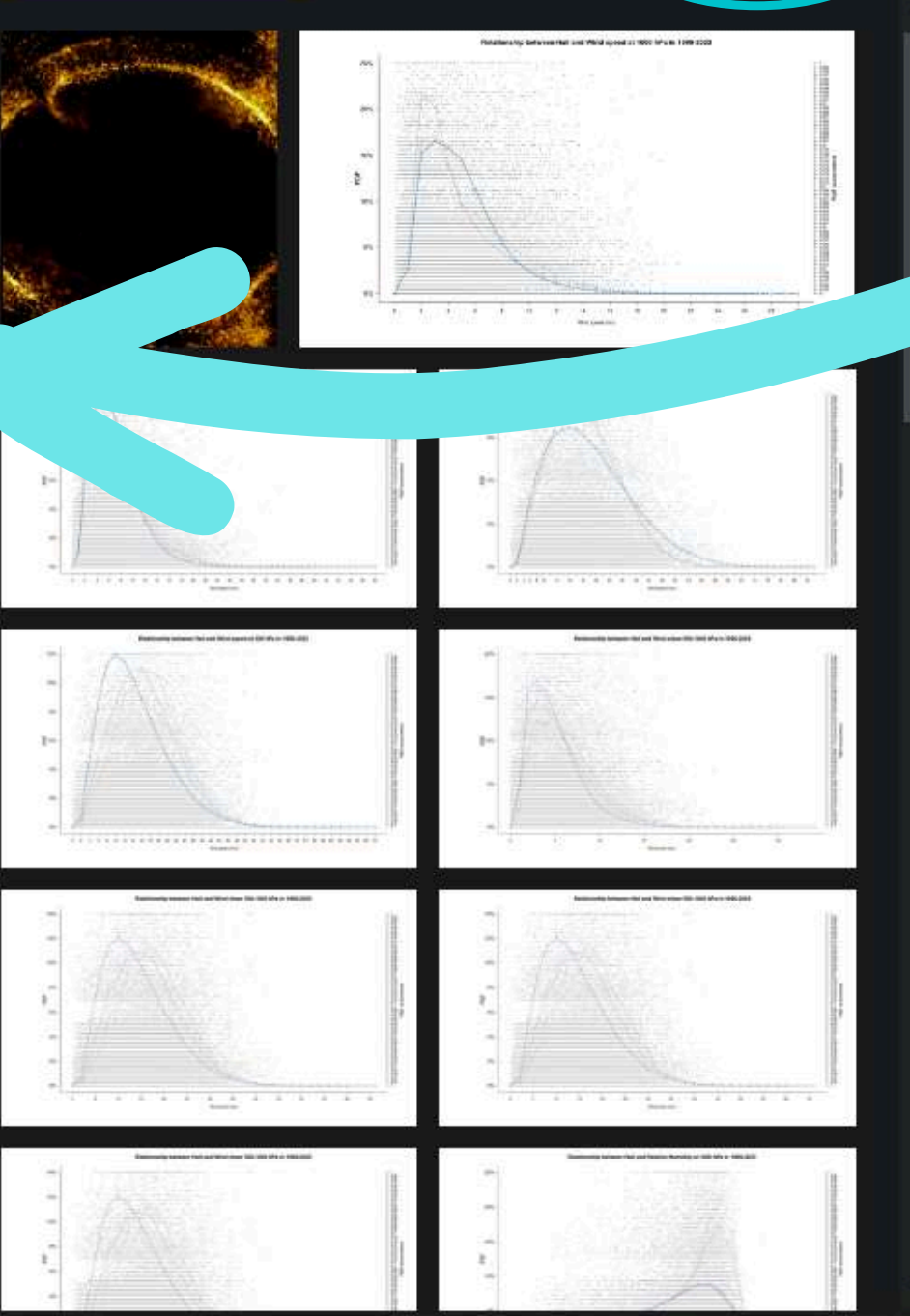
- Design
- Elements
- Text
- Brand
- Uploads
- Draw
- Projects
- Apps

Search images by keyword, tags, colour...

Upload files

Record yourself

Images Videos Audio



3

2

1

Upload an audio track inside the "Audio" window (start with the female voice and alternate with male)

- 1 TRAVELER, THERE IS NO PATH, THE PATH IS MADE BY WALKING
- 2 THE MOST IMPORTANT MOMENT OF OUR JOURNEY IS WHEN WE THROW AWAY THE MAP
- 3 DISTANCE DOESN'T MATTER, THE FIRST STEP IS THE HARDEST
- 4 WHAT WE DO IN LIFE ECHOES IN ETERNITY
- 5 EVERY JOURNEY IS A CONTEMPLATION IN MOTION
- 6 WHEN THE ROAD DOESN'T EXIST, INVENT IT!
- 7 THERE IS A DIFFERENCE BETWEEN KNOWING THE PATH AND WALKING THE PATH



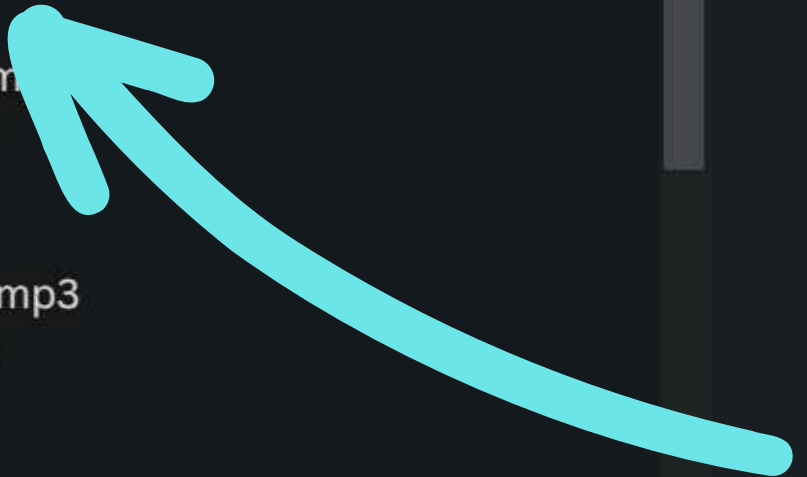
- Design
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- Apps

Search images by keyword, tags, colour...

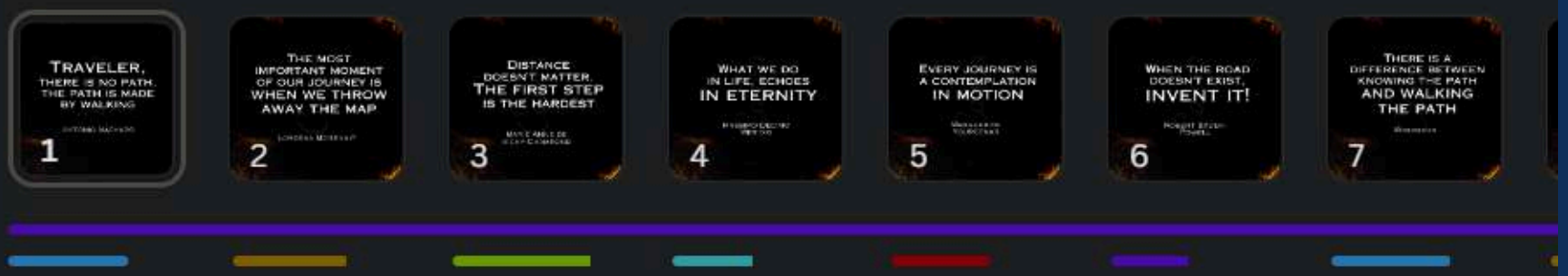
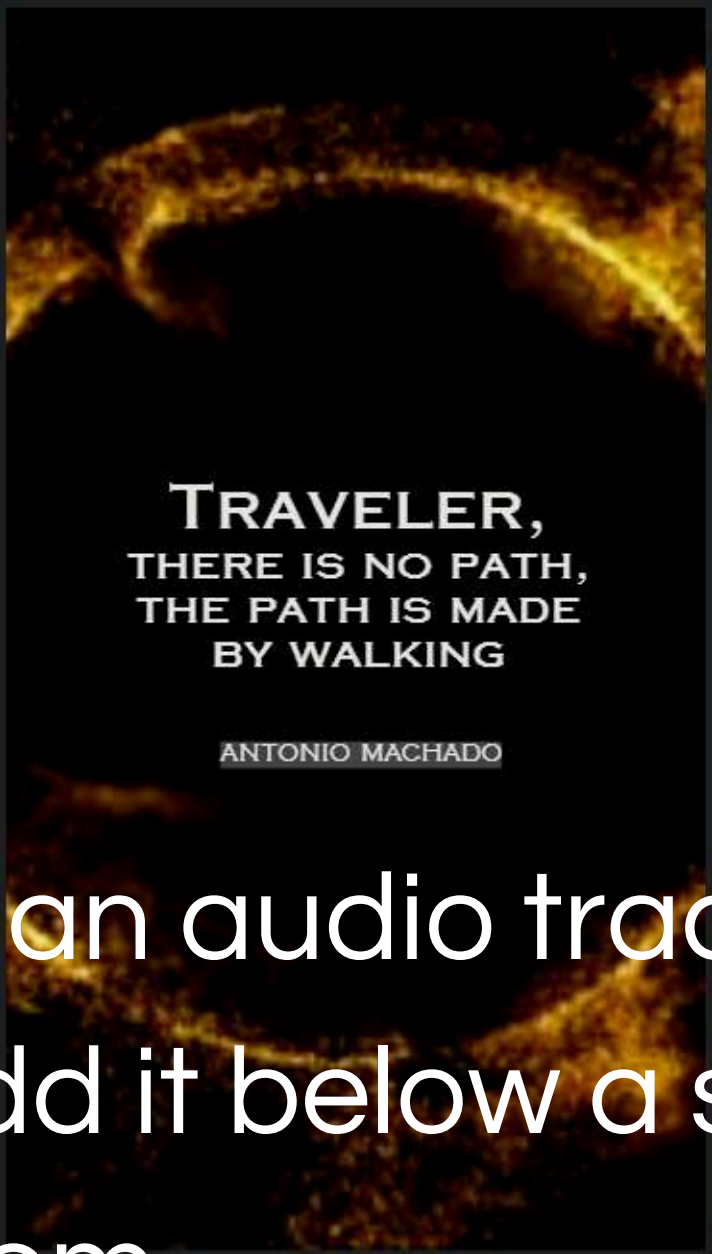
Upload files

Record yourself

- Images Videos Audio
- 804.mp3 0:04
 - 797.m 0:04
 - 821.mp3 0:06
 - 819.mp3 0:06
 - 817.mp3 0:06
 - 812.mp3



Click on an audio track to the left to add it below a slide at the bottom



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File

Resize

Editing

Shorts part 01 (#1-48) ITA

Try Pro for 30 days



Design



Elements



Text



Brand



Uploads



Draw



Projects



Apps



Search images by keyword, tags, colour...

Upload files

Record yourself

Images

Videos

Audio

804.mp3
0:04

797.mp3
0:04

821.mp3
0:06

819.mp3
0:06

817.mp3
0:06

812.mp3

Click on the "Duration" button to expand the view of each slide and of the audio tracks



Notes Duration

Page 1 / 48



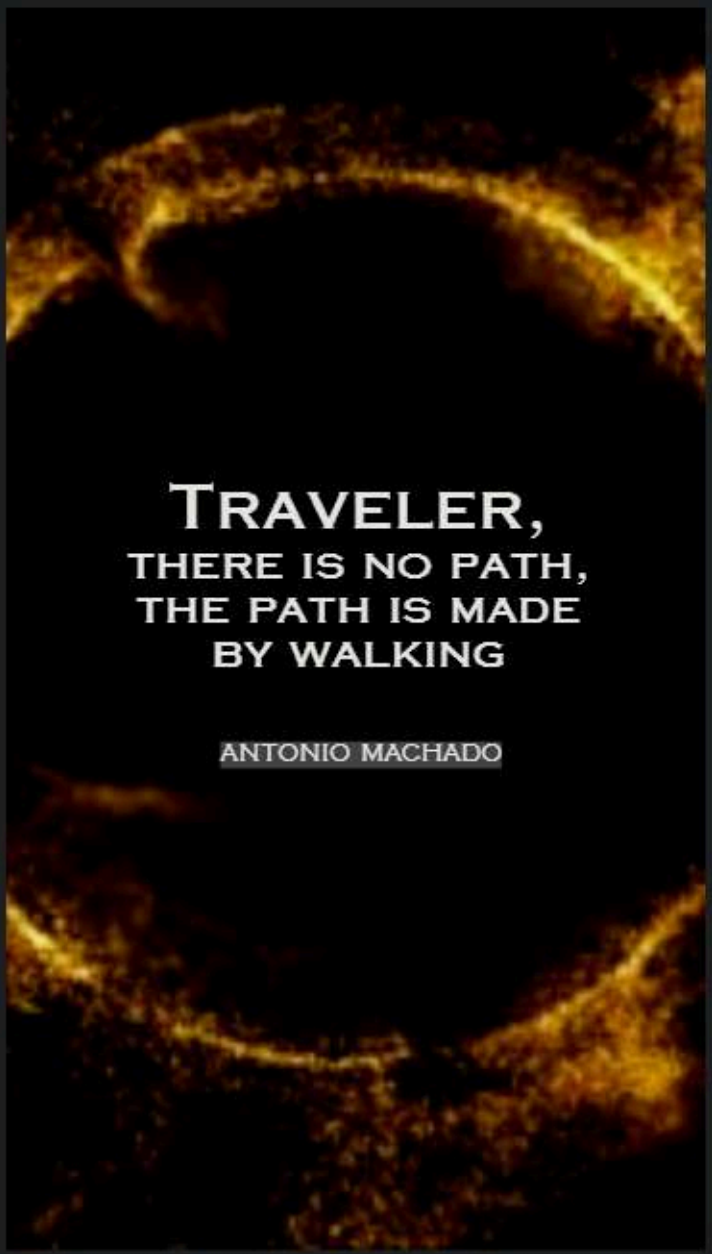
Design

Upload files ...

Record yourself

Images Videos **Audio**

- 804.mp3 0:04
- 797.mp3 0:04
- 821.mp3 0:06
- 819.mp3 0:06
- 817.mp3 0:06
- 812.mp3



You can move the audio clips from one slide to another by dragging them with the mouse

7.9s 8.0s 8.0s 8.0s 8.0s

5.1s

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