



CREATIVE ALE FOR SDGS

Accelerating Growth of MSMEs in the Philippines



CREATIVE AGE FOR SDGS

Accelerating Growth of MSMEs in the Philippines



AI AND TECHNOLOGY FOR CREATIVES

MODULE 6

by Chino Aricaya



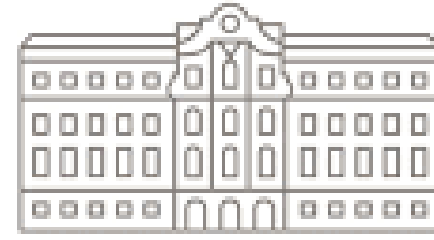
04 JULY 2024



Chino Carlo @ iamchinoa

A 34 year old stunner from Cavite PH with 8 years of experience in Social Media / Community Management / Paid Ads / Analytics / Project Management / Marketing and Communications / Multi-hyphenated Creative

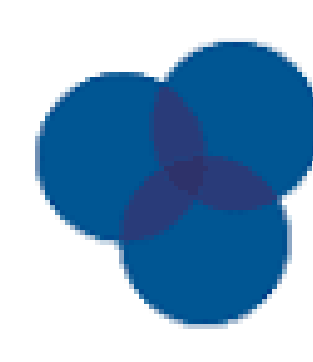
He works as a Social Media and Community manager for startups, celebrities, educational institutions within the Global University systems network, NGOs like Para Sa Sining (PH), galleries like Pineapple Lab (PH), and Waller Gallery (MD, USA), and festivals such as Fringe Manila, EuroPinoy Festival of the European Union PH, FiliXP by Department of Foreign Affairs, and UNstoppable Sessions by the United Nations Philippines. His latest project is with Thames International Business School as the Programme Manager for the Innovation and Creative Enterprise Programme and Creative AGE through the grants awarded by the United Nations Department of Economic and Social Affairs. He also worked as an Individual branding Consultant for the United Nations Development Programme and DENR :)



SALZBURG
GLOBAL
SEMINAR



UNITED
NATIONS
PHILIPPINES



GLOBAL
UNIVERSITY
SYSTEMS



THAMES
INTERNATIONAL





Identify if an image is ai-generated or not

(<https://sightengine.com/ai-or-not>)



The image of a dawn marine layer of fog hovering in a valley



Smooth and painterly, the desert landscape



Image of people milling about in a glass -walled building interior, taken through the windows above Apple's Steve Jobs Theater in Cupertino, California,



Image of the couple in front of the Golden Gate bridge



The image of an enthusiastic crowd at a Classixx show at the Outside Lands music festival in San Francisco in 2015



Image of three women at a cafe



Image of a man and his dog at a campsite



The image of a smiling Japanese woman at a tiki hut on a beach in Thailand



The delicious -looking avocado toast on the dark stoneware plate



Tasty-looking avocado toast on the white paper plate



Image of the wooden headphones



Image of gray headphones



The image of the young woman on a bench



The image of Lake Tahoe taken in Incline Village, Nevada



SJ Sindu



Shakti available for pre-...



@SJSindu

We don't need AI to make art. We need AI to write emails and clean the house and deliver the groceries so humans can make more art.

MODULE

DESCRIPTION

In the rapidly evolving landscape of creativity, this module delves into the integration of artificial intelligence (AI) tools and emerging technologies to empower creatives in optimizing their workflows and fortifying their businesses for the future. Through a comprehensive exploration of cutting-edge advancements, participants will gain insights into the potential of AI to enhance creativity, streamline processes, and foster sustainable practices in creative production.

This module also serves as a bridge between the realms of creativity and technology, offering participants a strategic approach to leverage AI for innovative ideation and production. Real-world case studies illuminate how pioneering creatives have successfully integrated AI into their workflows, fostering efficiency and innovation. Participants will engage in hands-on activities to apply AI tools to their creative processes, unlocking new dimensions of artistic expression and productivity.

LEARNING

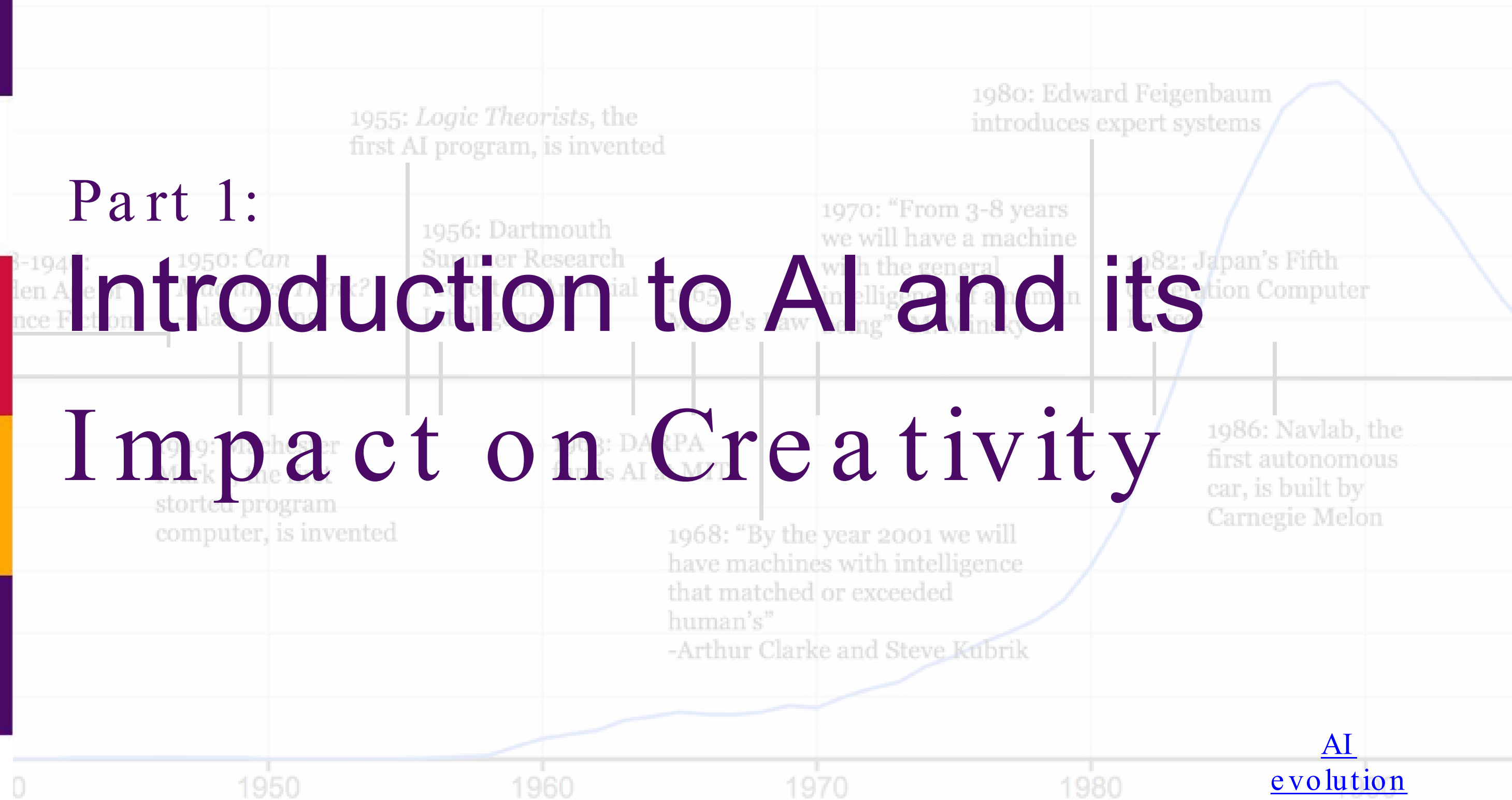
OUTCOME



Upon completion of this module, participants will be able to:

1. Identify AI tools relevant to their creative domains for improved efficiency and innovation;
2. Seamlessly incorporate AI technologies into their creative workflows to enhance productivity and output quality;
3. Explain how AI can be used to anticipate and adapt to emerging technologies, future-proofing their creative businesses against industry shifts;
4. Implement AI applications tailored to various creative disciplines, from visual arts to content creation; and
5. Analyze legal and ethical considerations associated with the use of AI in creative processes.

ARTIFICIAL INTELLIGENCE TIMELINE

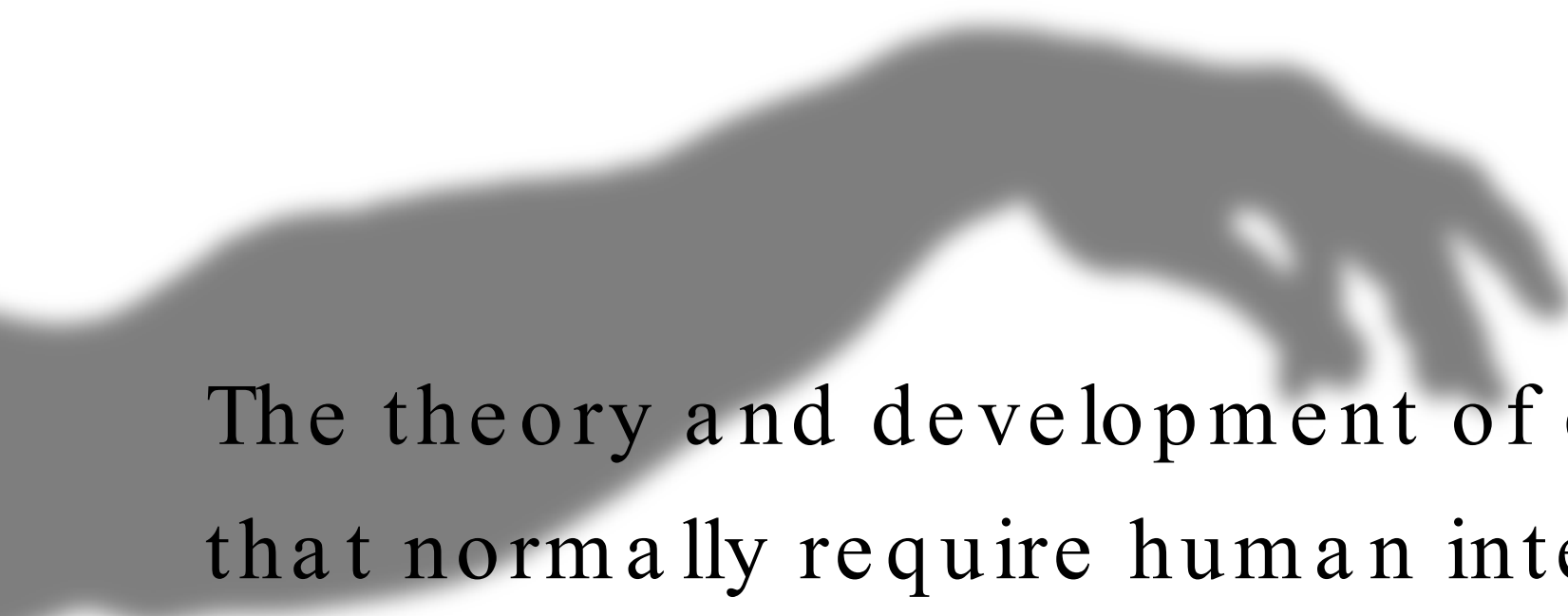


Part 1:
**Introduction to AI and its
Impact on Creativity**

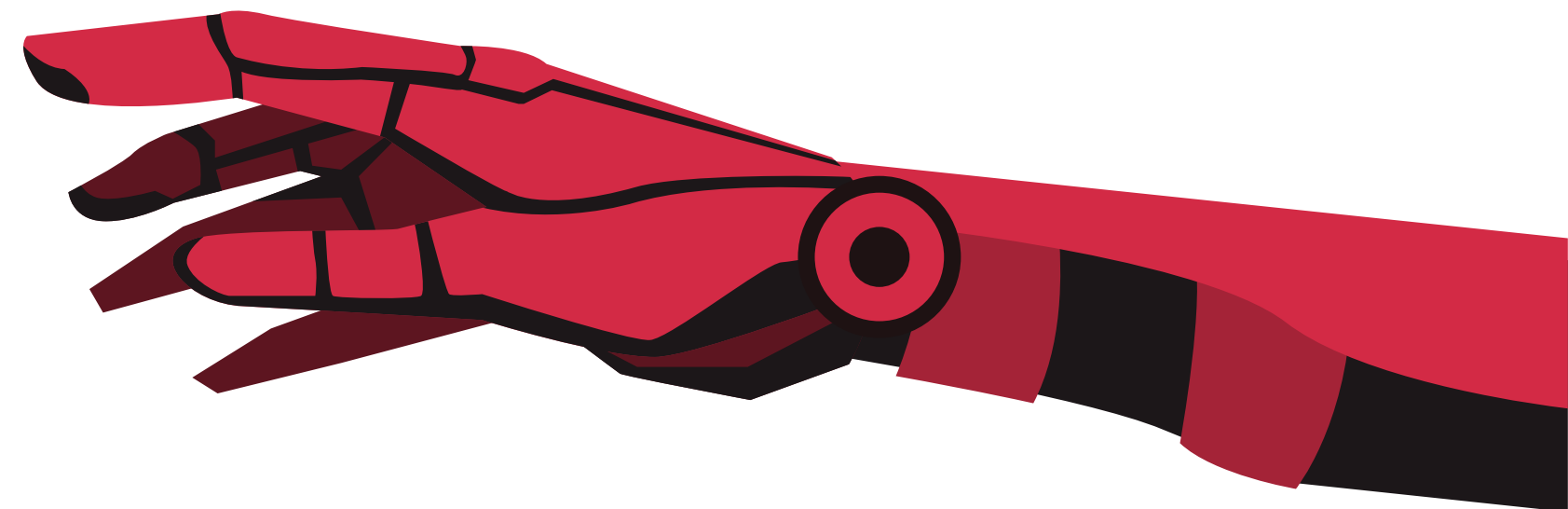


01

What is AI?



The theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.



01

What are types of AI?

Artificial Intelligence based on capabilities:

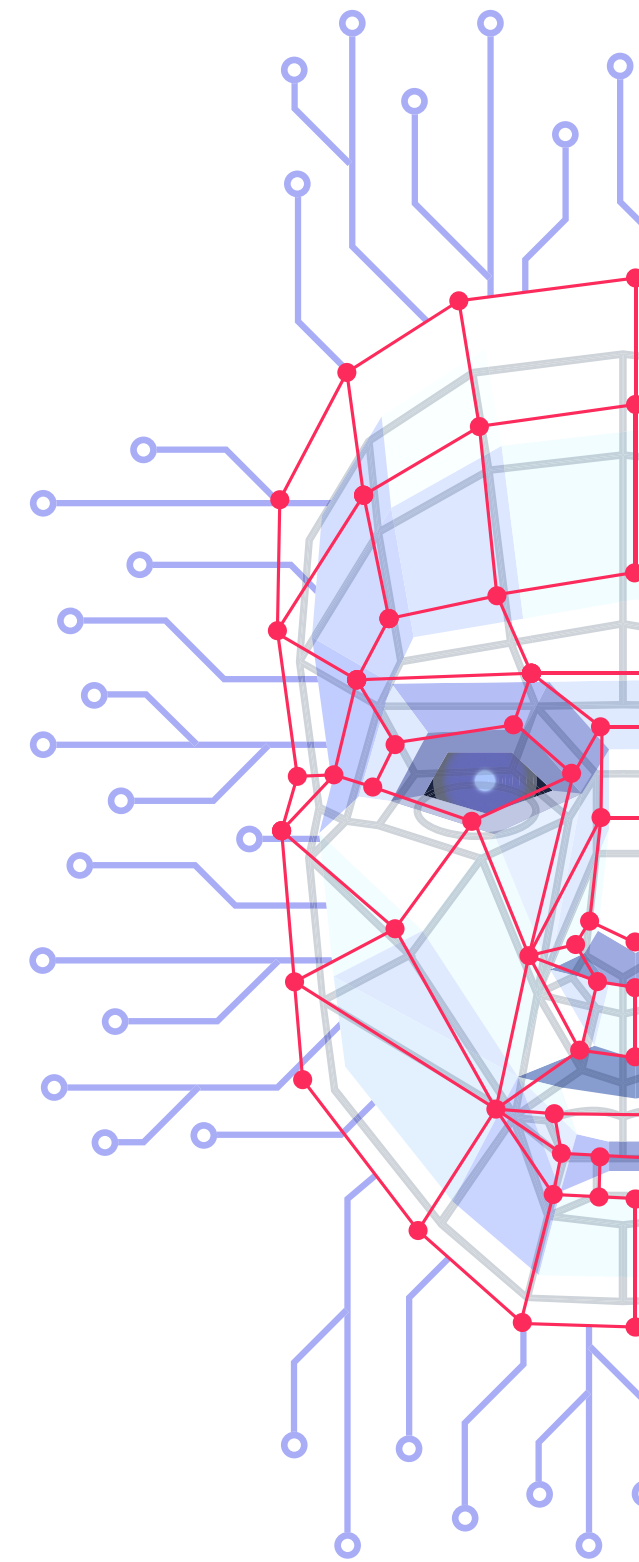
Narrow AI (Weak AI) is designed to perform a specific set of tasks and it has the ability to learn from data.

Examples of Narrow AI:

- Virtual assistants like Siri by Apple, Alexa by Amazon,
- Self-driving cars
- Image or facial recognition software
- Disease mapping & prediction tools

General AI (Strong AI) are machines are designed to think, reason, and act like a human. It has the ability to learn, reason, and make decisions in a wide variety of contexts. The concept of General AI has not yet been achieved by researchers.

Super AI or Artificial Superintelligence (ASI) would be capable of outperforming humans. They can perform any task better than humans. The concept of Super AI is still hypothetical.



01

What are types of AI?

Artificial intelligence based on functionalities

Reactive machines - oldest and the most basic forms of AI systems that are purely reactive. They have limited capability and do not have functionality based on memory. ex. programmable coffeemakers or washing machines are designed to perform specific functions, but they do not have memory.

Limited memory - machines that possess the capabilities of reactive machines and are also capable of learning from past experiences and using that data to make decisions. Almost all present-day AI systems such as chatbots, self-driving cars, virtual assistants, etc fall under this category of AI.

Note: Limited memory machines store large volumes of data to form a reference for solving future problems.

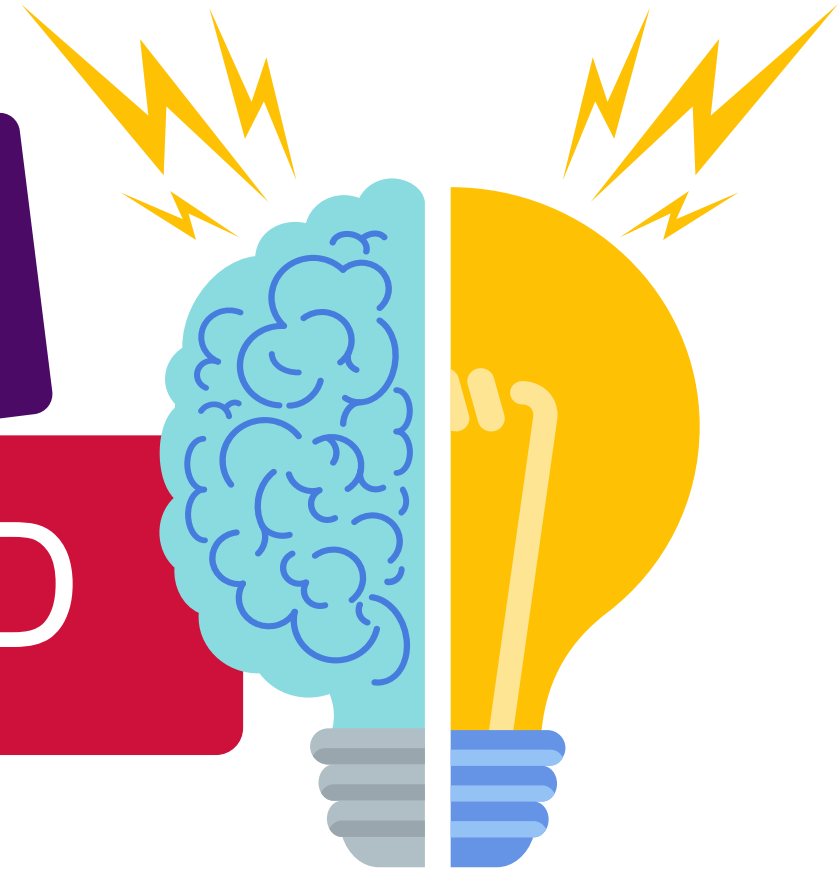


WHAT ARE THE TYPES OF AI?

PART I.

THEORY OF

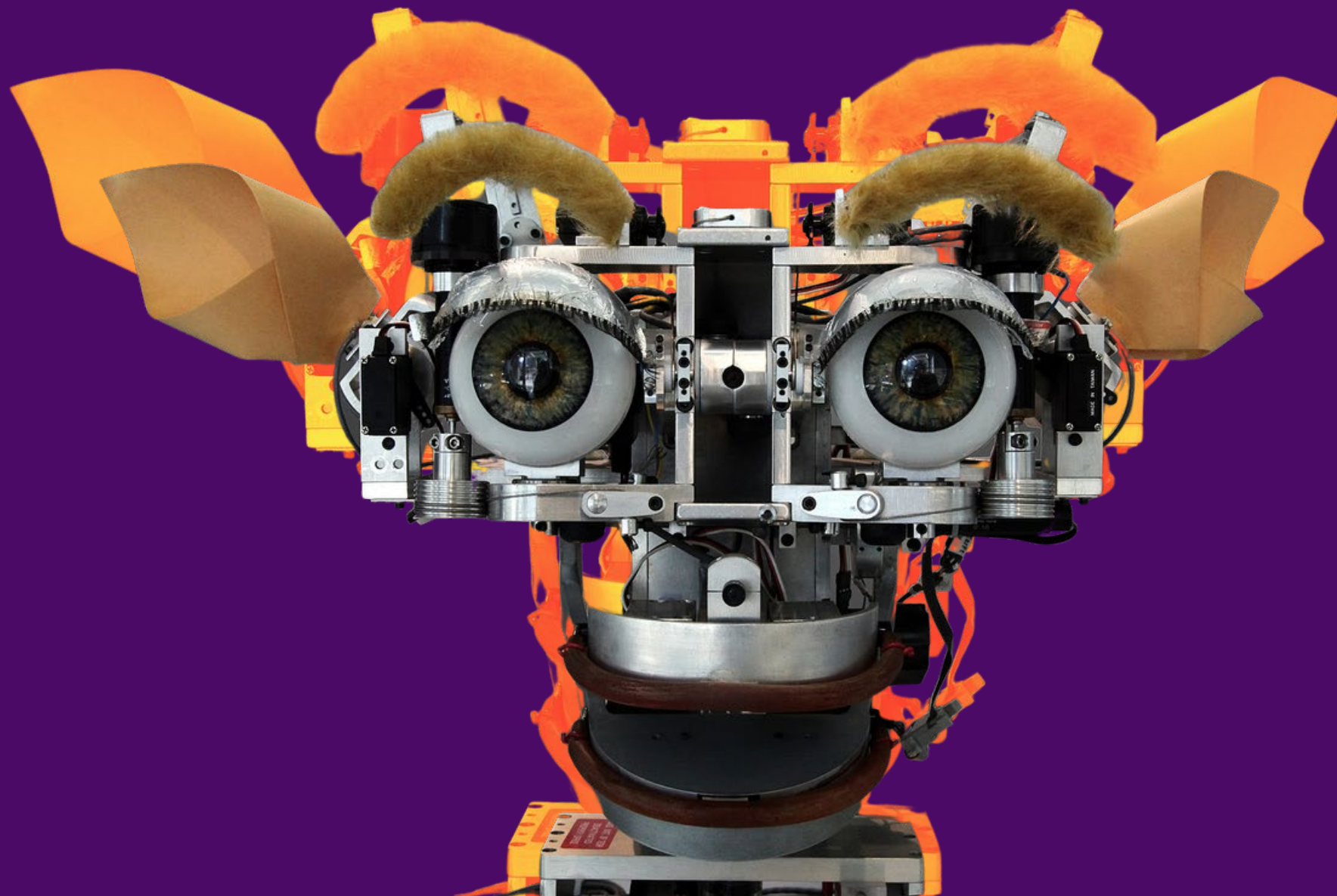
MIND



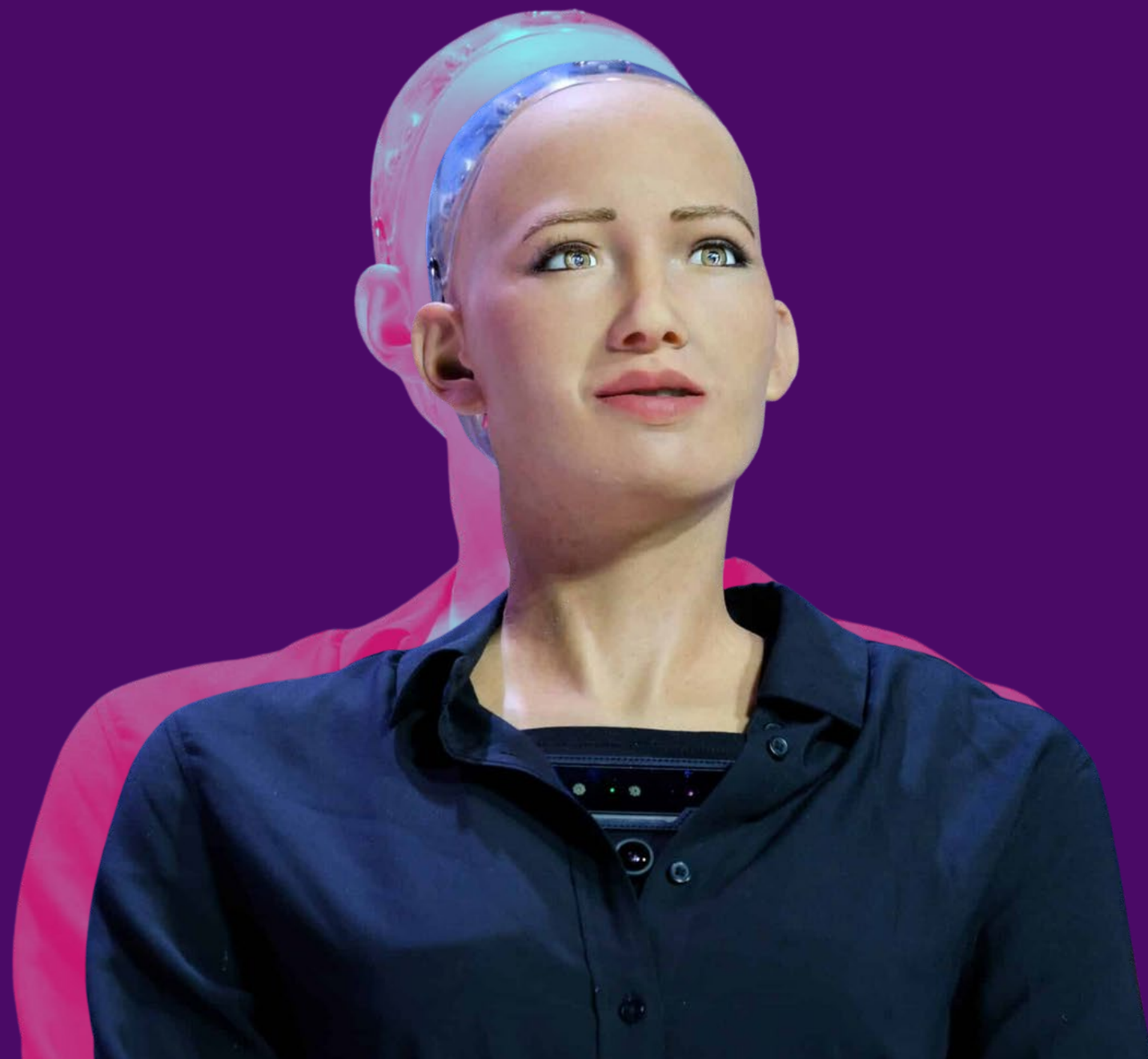
The next advanced level in AI systems that scientists are trying to develop. It exists only as a hypothetical concept now. This type of AI needs a clear understanding of human feelings and behavior within an environment.

KISMET

A robot developed in the 1990s was capable of recognizing human facial emotions and could replicate those emotions with its facial features, eyes, lips, ears, eyebrows, and eyelids.

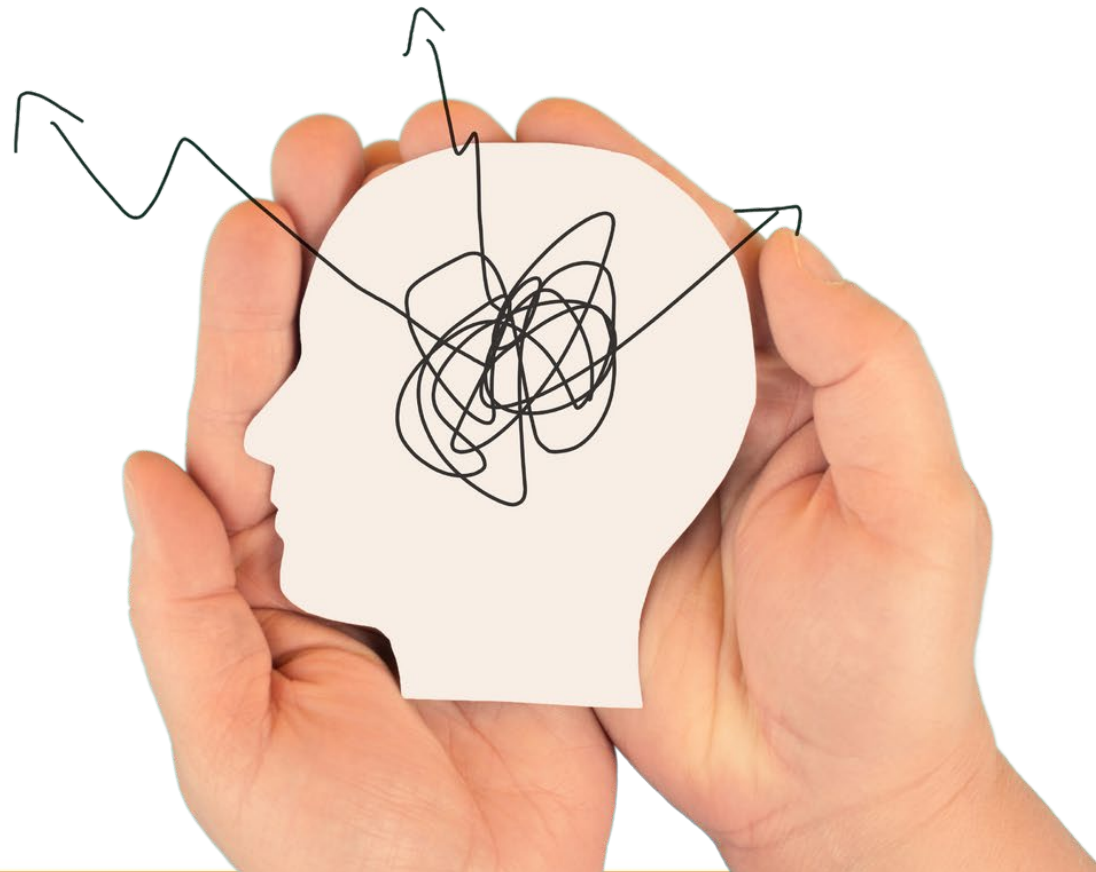


SOPHIA

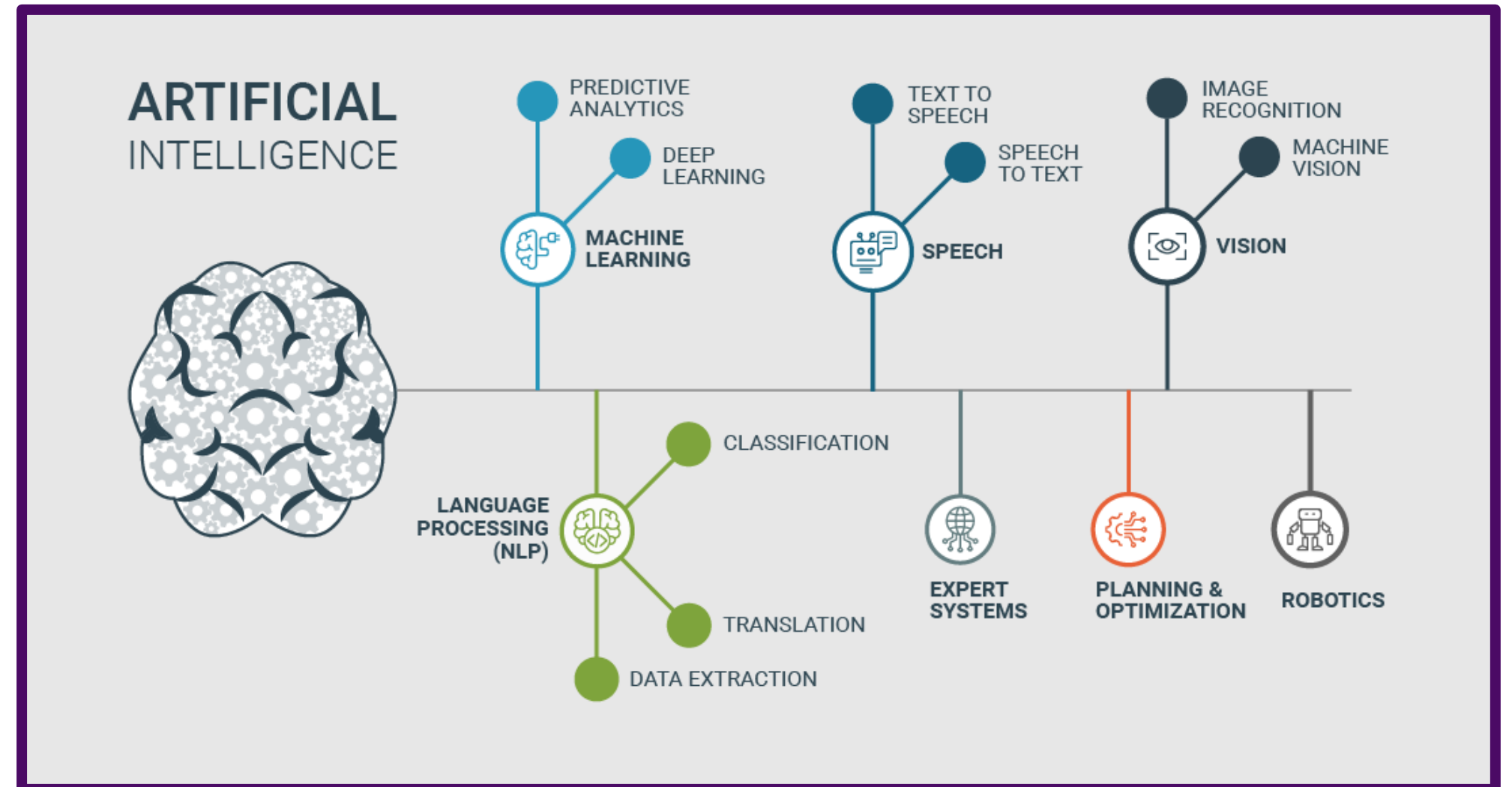


The humanoid robot was created by Hanson Robotics in 2016 and is known for its prominent human-like appearance, facial expressions, and behavior as compared to previous variants.

Self Awareness



Final and most advanced stage of AI, which is currently a hypothetical concept. This will be possible when machines develop self-awareness and have human-like consciousness. Self-aware AI machines will have the same needs, emotions, and desires as humans.



PART II.

AI TOOLS FOR

CREATIVES



AI

FOR TEXT GENERATION

ChatGPT: OpenAI Text Generator

Frase.io: Ai for SEO Articles

Rytr.me: AI Writing Assistant.

Jasper.ai: AI Copy Writer.

WriteSonic: AI Writer.

Copy.ai: AI Copywriter for Marketing.

Copysmith: AI Product Content Creation Software.

Hypotenuse AI: AI Writing Assistant & Text Generator.



ChatGPT

THE MOST ADVANCED CHATBOT FOR 2022

ChatGPT (Generative Pre-trained Transformer) is a chatbot launched by OpenAI in November 2022. It is built on top of OpenAI's GPT-3 family of large language models, and is fine-tuned (an approach to transfer learning) with both supervised and reinforcement learning techniques.

<https://openai.com/blog/chatgpt/>





Examples

"Explain quantum computing in simple terms" →

"Got any creative ideas for a 10 year old's birthday?" →

"How do I make an HTTP request in Javascript?" →



Capabilities

Remembers what user said earlier in the conversation

Allows user to provide follow-up corrections

Trained to decline inappropriate requests



Limitations

May occasionally generate incorrect information

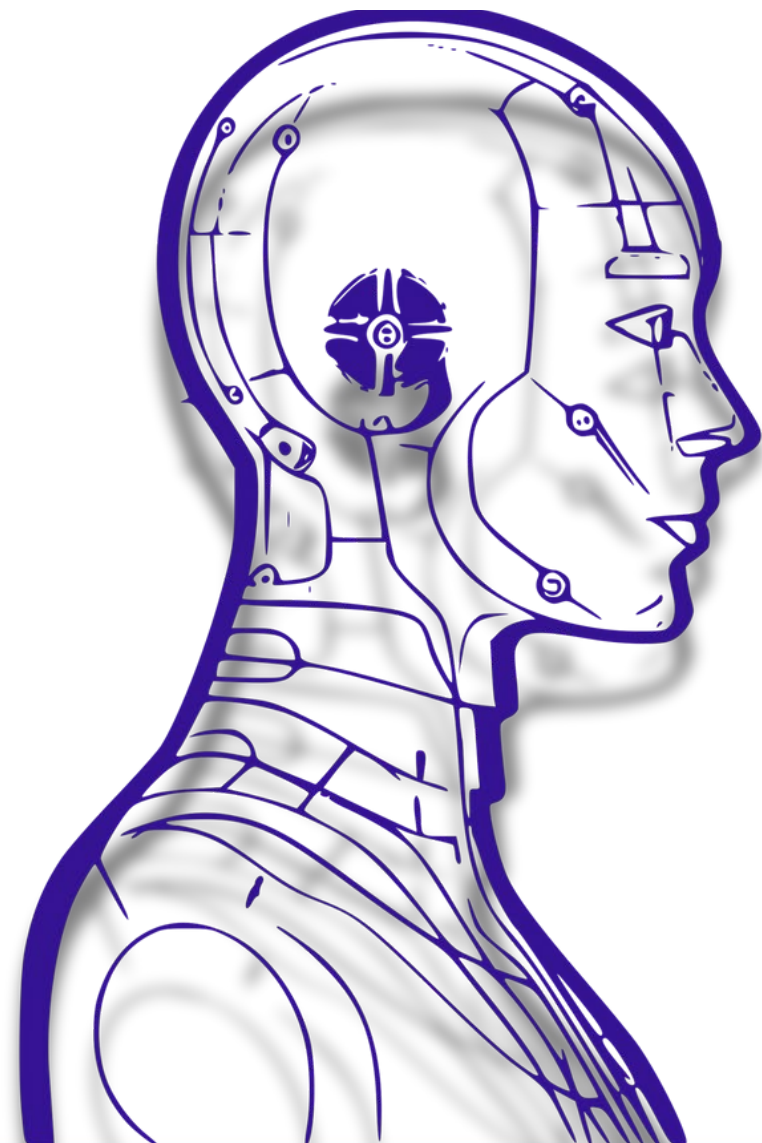
May occasionally produce harmful instructions or biased content

Limited knowledge of world and events after 2021

MAKING THE

PERFECT

PROMPT



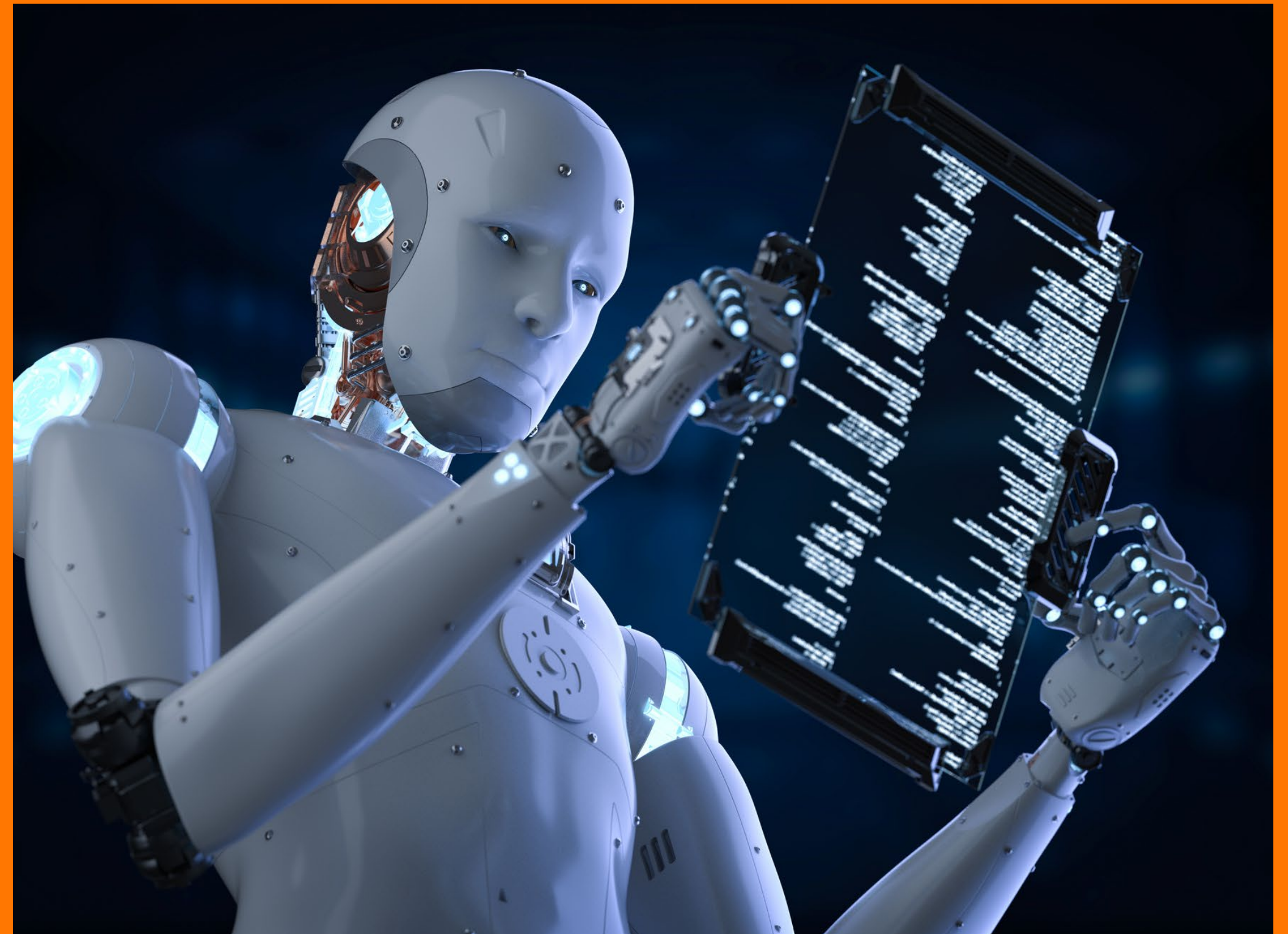
- Write clear instructions
- Ask ChatGPT to adopt a persona
- Use delimiters to indicate distinct parts of the input
- Provide reference text
- Specify the steps to take to complete a task
- Provide examples
- Specify the desired length of the output

Copy.ai

AI FOR CONTENT WRITING

Built to make you efficient. Meet your brainstorming buddy, blank page remover, research assistant, and expert copywriter: Chat by Copy.ai. Use our generative AI platform to work faster, smarter, and anything but harder. Whatever you need, just ask.

<https://app.copy.ai>



- Chat
- My Projects
- Infobase
- Brand Voice
- Templates
- Tools >

Workflows >

Upgrade to Pro

Chino Carlo's...
Free Plan

Welcome to Chat by Copy.ai

Get started by writing a task and Chat can do the rest. Not sure where to start? Check out the Prompt Library for inspiration.

Real-Time Search

"Summarize the latest news on generative AI"
"Write a personalized email to [insert Linkedin profile URL]"

Long Form Content

"Create a blog post about search engine optimization"
"Write a press release about www.copy.ai"

Ask or search anything

Attach Browse Prompts No Brand Voice

Improve

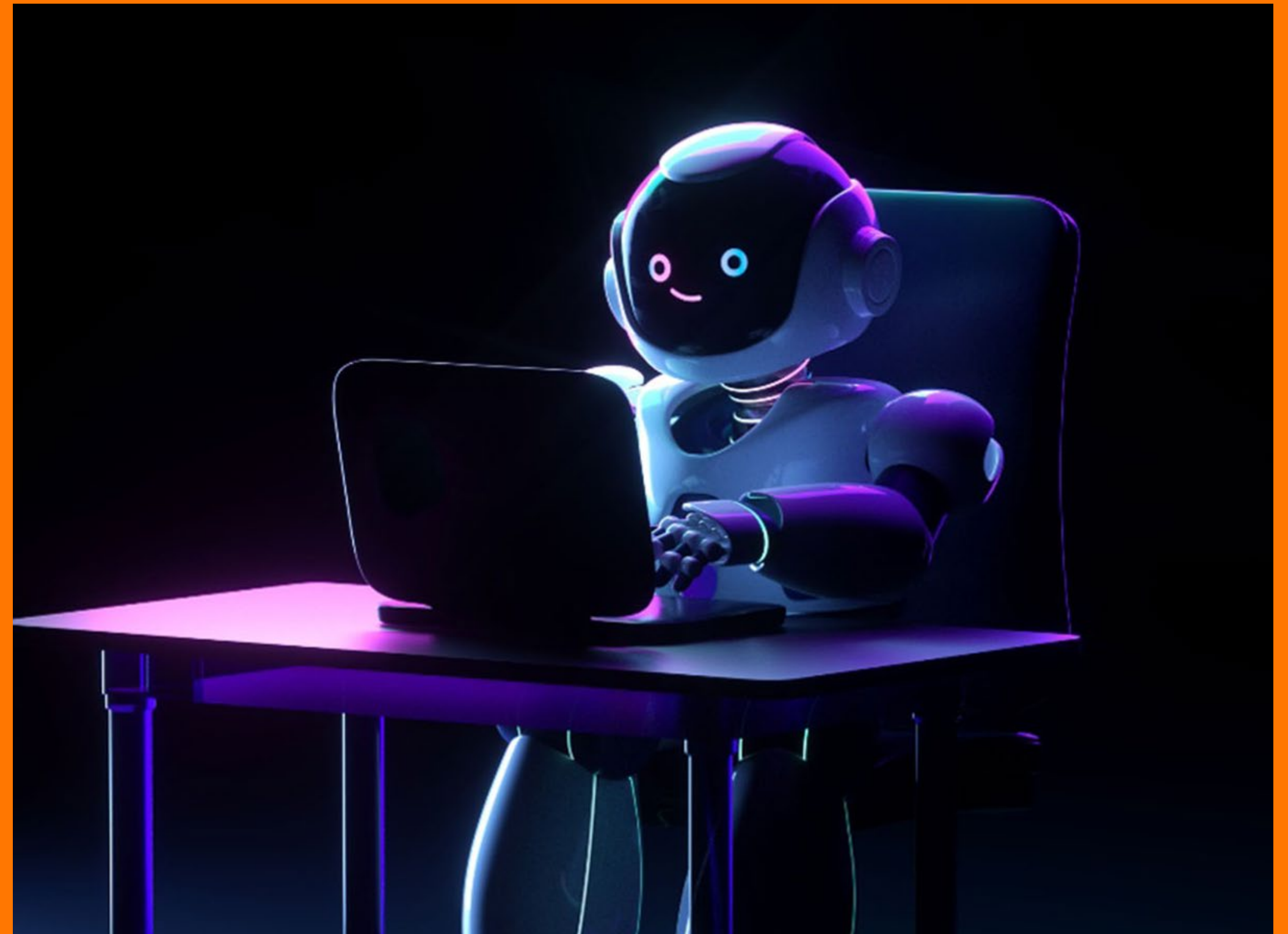
Editor

Frase

AI WRITING SOFTWARE

Frase.io is an AI-powered copywriter that generates high-quality copy for your business. Frase is the fastest and easiest way to create content that ranks.

<https://www.frase.io/>



AI

FOR IMAGE GENERATION

Fotor
NightCafe
Dream by WOMBO
DALL-E 2
Midjourney
Dream Studio (Stable Diffusion)
Craiyon
Deep Dream Generator
StarryAI
Artbreeder
Photosonic





DALL-E 3

AI POWERED IMAGE GENERATION

DALL-E 3 is a new AI system that can create realistic images and art from a description in natural language.

<https://openart.ai/create>



PROMPT !

Poster of a cozy coffee shop in the middle of a graveyard, digital painting, eerie fog surrounding the scene, vintage sepia tones, haunting atmosphere, detailed tombstones with intricate carvings, old-fashioned coffee brewing equipment, warm inviting glow from the shop's windows, high quality, detailed digital painting, vintage sepia, eerie fog, graveyard setting, detailed tombstones, coffee brewing equipment, haunting atmosphere, warm and inviting lighting



Nightcafe

AI POWERED IMAGE GENERATION

NightCafe Creator is an AI Art Generator app with multiple methods of AI art generation. Using neural style transfer you can turn your photo into a masterpiece.

<https://creator.nightcafe.studio/>



My Creations

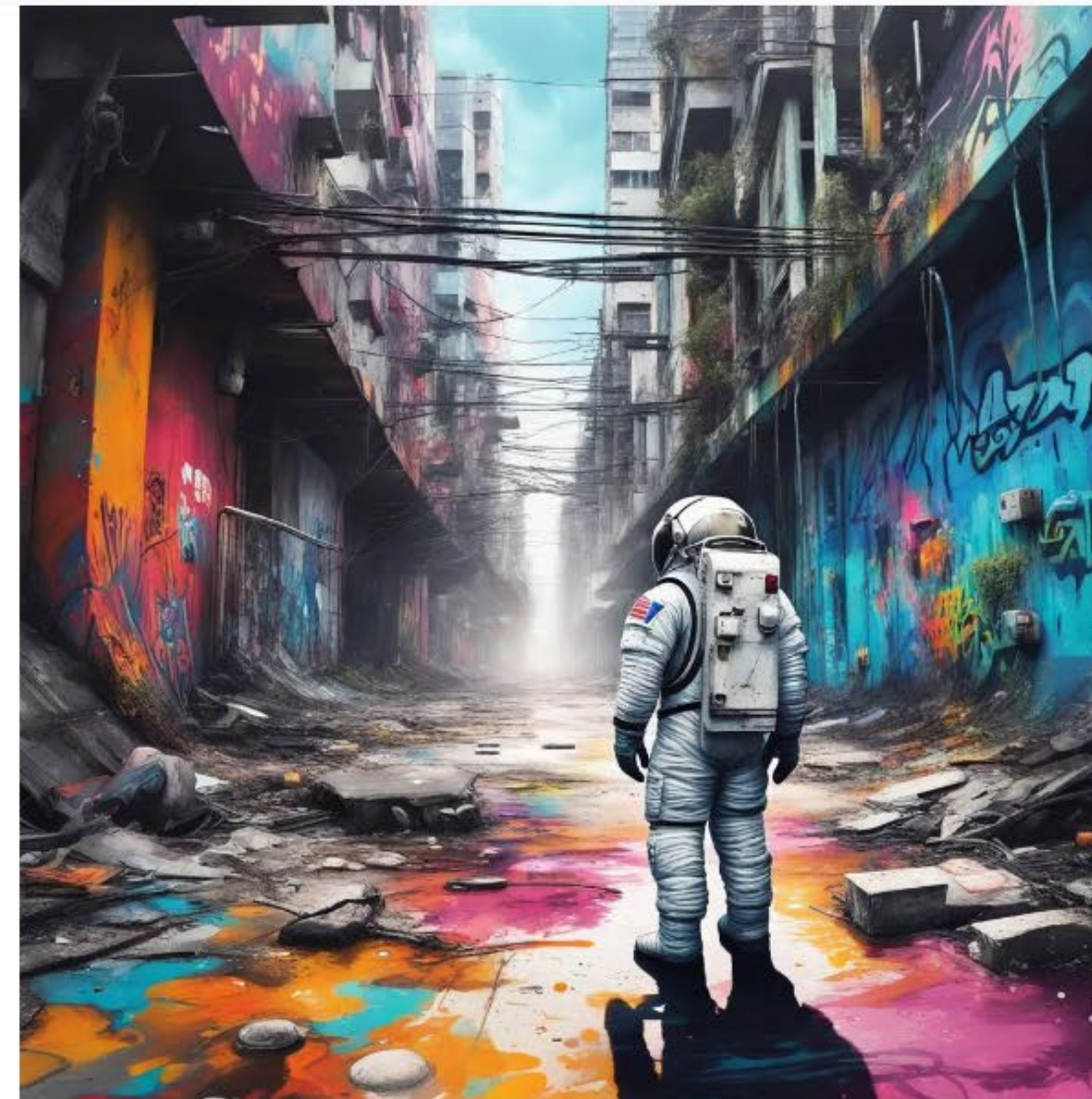
[Publish](#)

astronaut exploring futuristic but abandoned manila

Created a few seconds ago

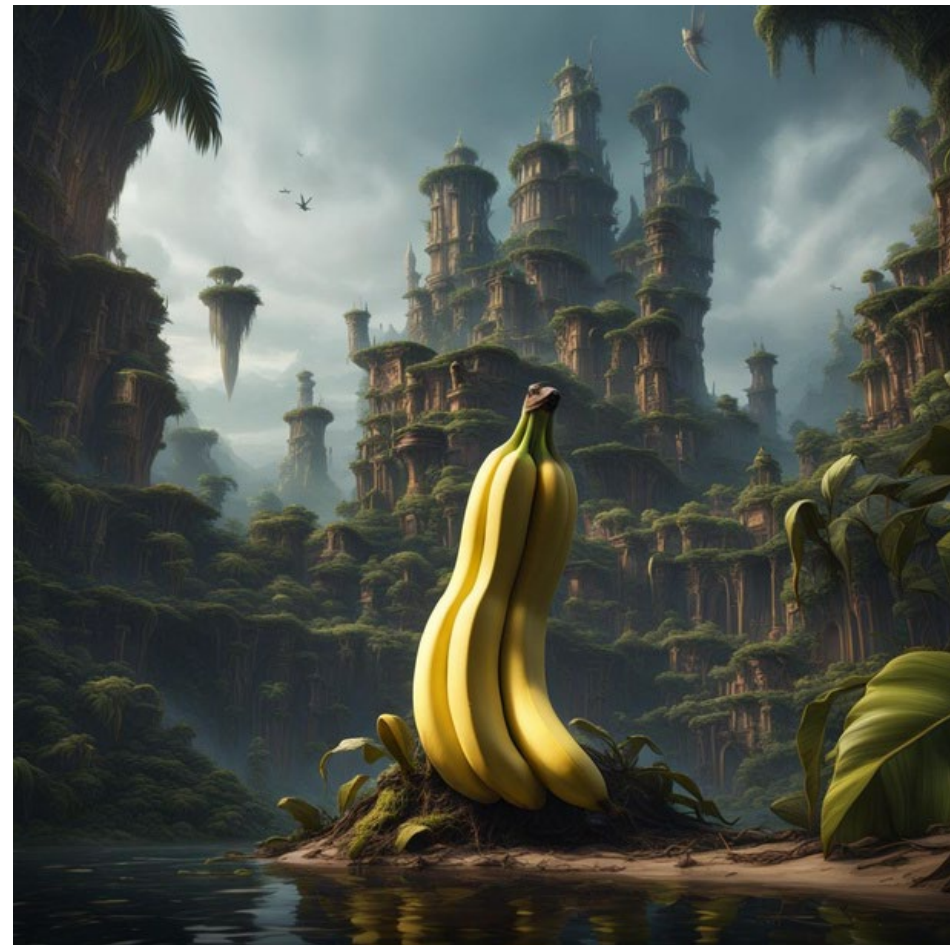
Stable Short Medium Res

EVOLVE THIS CREATION



MINI

CHALLENGE!



Using AI, try to create an image of a single piece banana

AI

FOR MUSIC

Soundraw
Boomy
Beethoven
Musicfy



Suno Ai

MUSIC CREATION VIA AI

Simply choose the mood, the genre and the length. Our AI will generate beautiful songs for you.

<https://suno.com/>



SoundDraw

MUSIC CREATION VIA AI

Simply choose the mood, the genre and the length. Our AI will generate beautiful songs for you.

[https:// soundraw.io/](https://soundraw.io/)

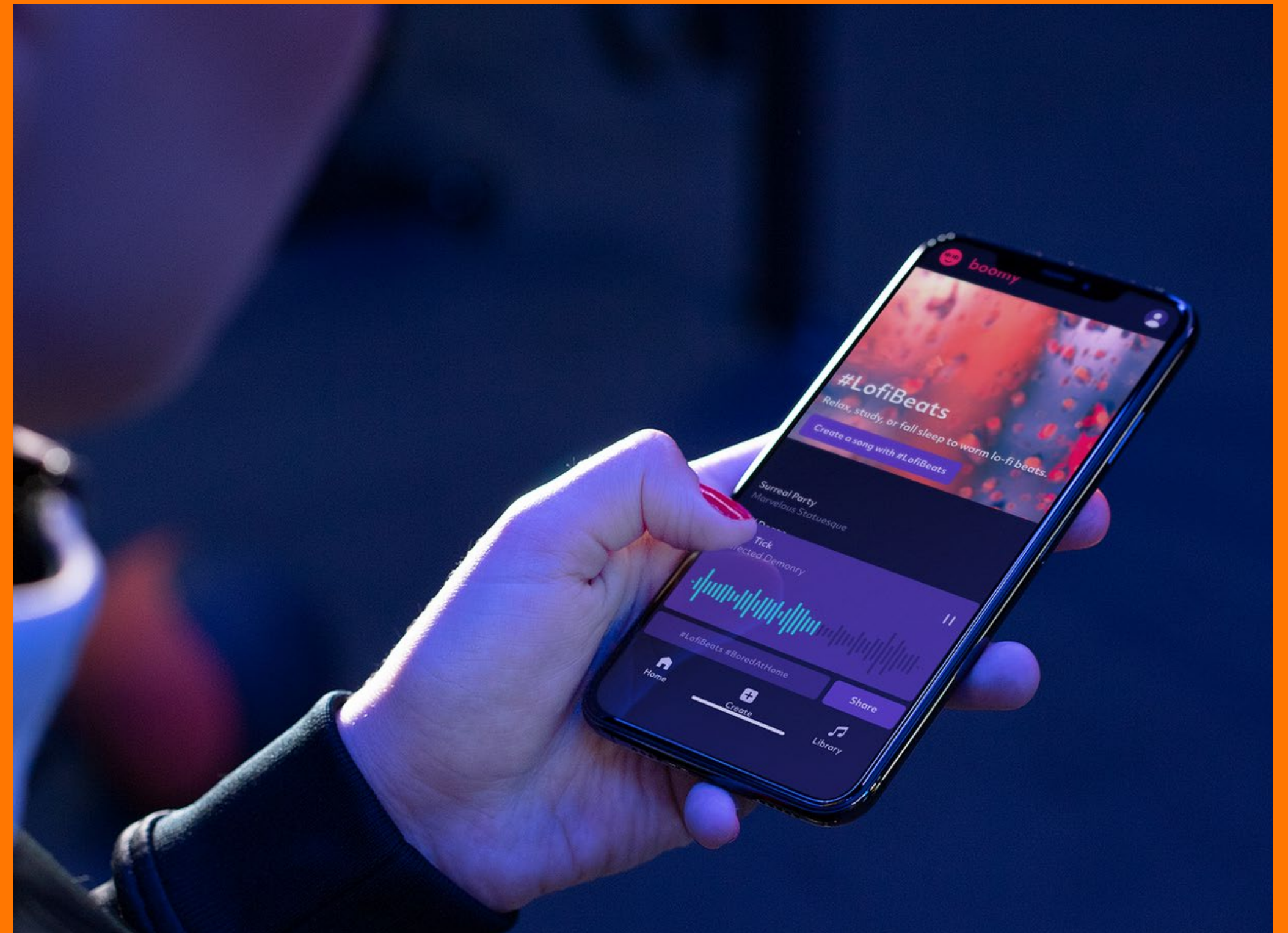


Boomy

MUSIC CREATION USING AI

Make music with Boomy AI ·
Create original songs in seconds,
even if you've never made music
before

<https://boomy.com/>

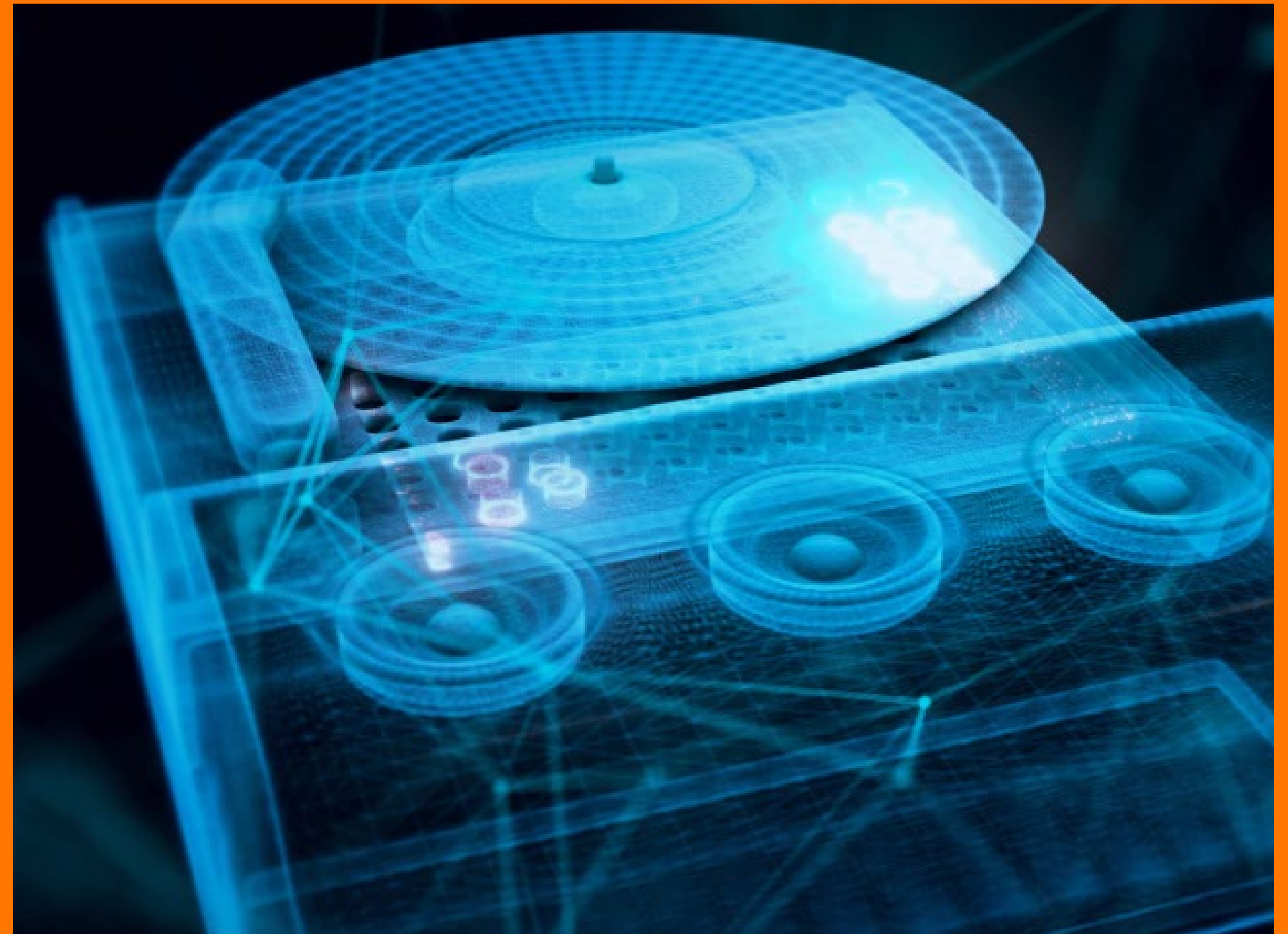


Beethoven.ai

MUSIC CREATION VIA AI

Beethoven.ai makes it easy for content creators to generate background music with the help of AI

<https://www.beethoven.ai/>



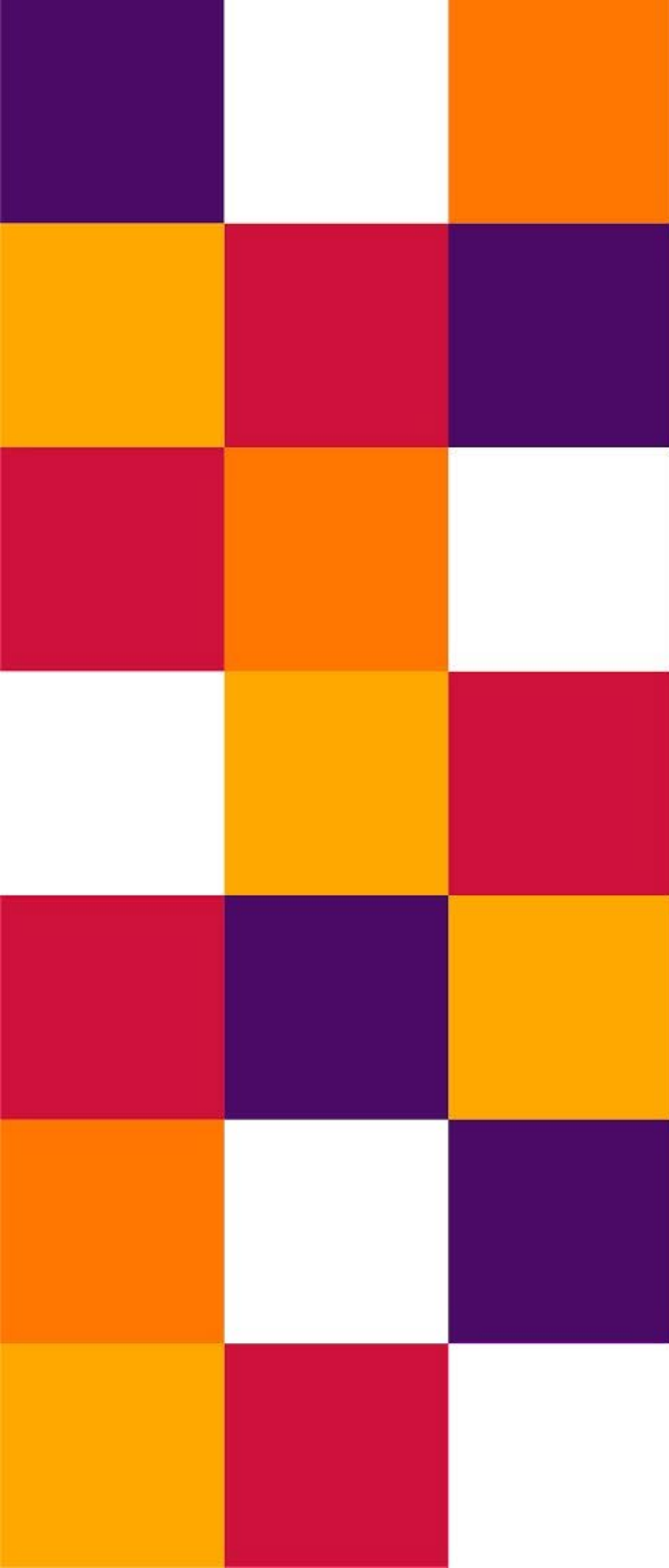
Musicfy

AI VOICE SONG GENERATOR

Use our industry-leading AI voice song generator to create covers with AI in any voice. Choose from 100000+ voices or make a clone of yours.

[Musicfy](#)





AI Magic Tools

AI-powered creative tools to help you ideate, generate and edit content like never before.

All Audio Video Image Text



Train a Portrait Generator
Create your own portrait generator for any style.



Train a Custom Image Generator
Create your own image generator to use for any subject.



Train a Custom Image Generator
Create your own image generator to use for any subject.



Image to Image
Transform any image with nothing but words.



Expand Image
Easily expand the edges of any image to a new aspect ratio.



Frame Interpolation
Turn a sequence of images into an animated video.



Image to Image
Transform any image with nothing but words.



Image to Image
Transform any image with nothing but words.



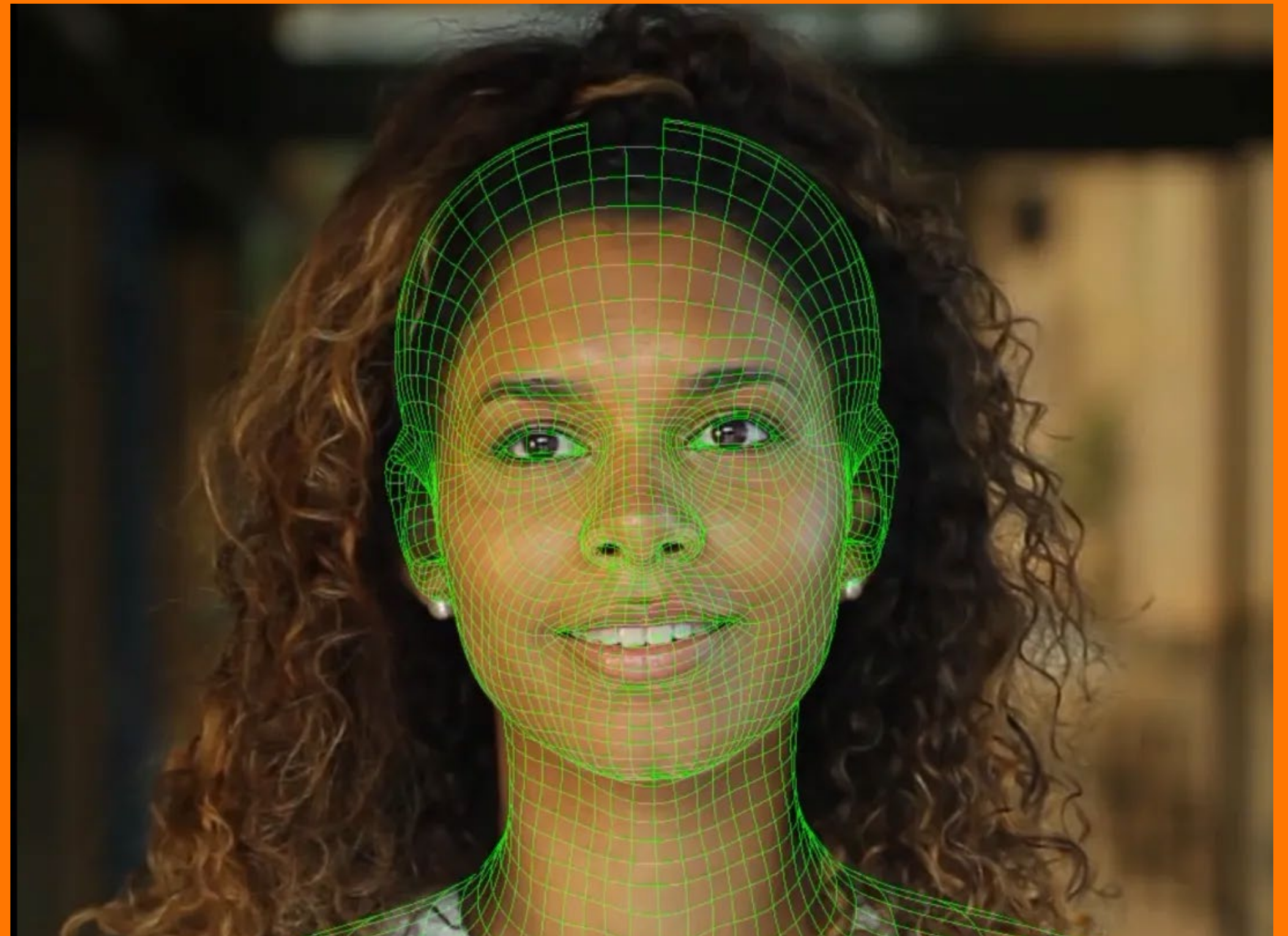
Image to Image
Transform any image with nothing but words.

Synthesisia

VIDEO CREATION VIA AI

Synthesisia is the #1 rated AI video creation platform. Thousands of companies use it to create videos in 120 languages, saving up to 80% of their time and budget

[https:// www.synthesia .io/](https://www.synthesia.io/)



Create a free AI video

Select a template & edit your script. Political, sexual and discriminatory content will not be approved.

1 SELECT VIDEO TEMPLATE

Synthesia Demo

Sales Pitch

Learning & Development

Compliment

How-To Video

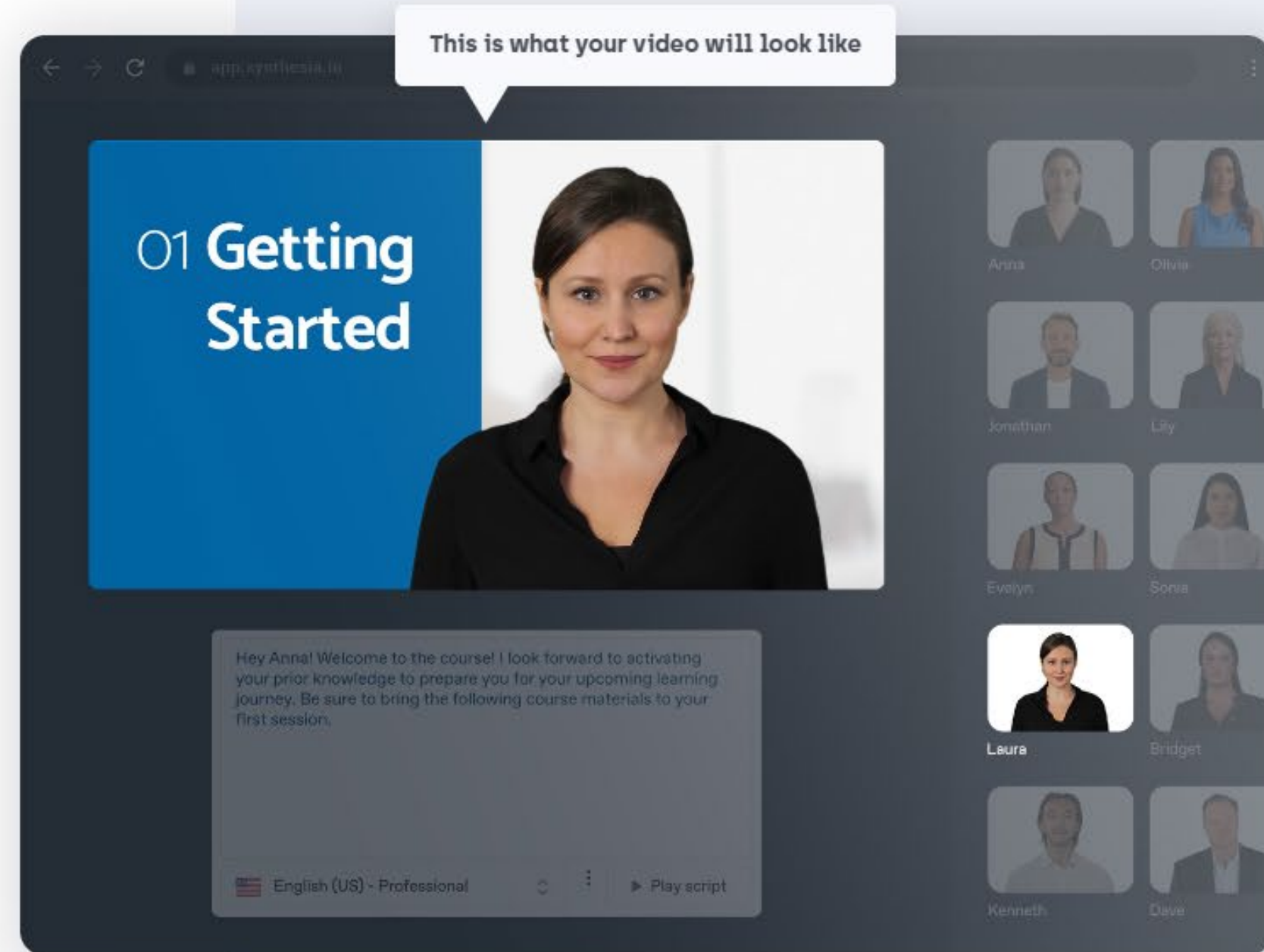
2 EDIT YOUR VIDEO SCRIPT

You can use any popular language

Hey Anna! Welcome to the course! I look forward to activating your prior knowledge and preparing you for your learning journey. Be sure to bring the following course materials to your first session.

1 characters left

Continue





Pika

VIDEO ON COMMAND

Pika is the idea-to-video platform that sets your creativity in motion.

<https://www.synthesia.io/>





Prompt: Claymation, stop motion, toad becomes a dragon

Runway

Runway AI is a multimodal system that can generate novel videos with text, images or video clips.



<https://www.synthesia.io/>

PROMPT

Settings

Scale

0.75x

Aspect Ratio

Mobile vertical (9:20)

Prompt (optional)

Set the scene:

an asian man holding a microphone and smiling in a field full of flowers

Generate



Captions.ai

AI POWERED CAPTIONING TOOL

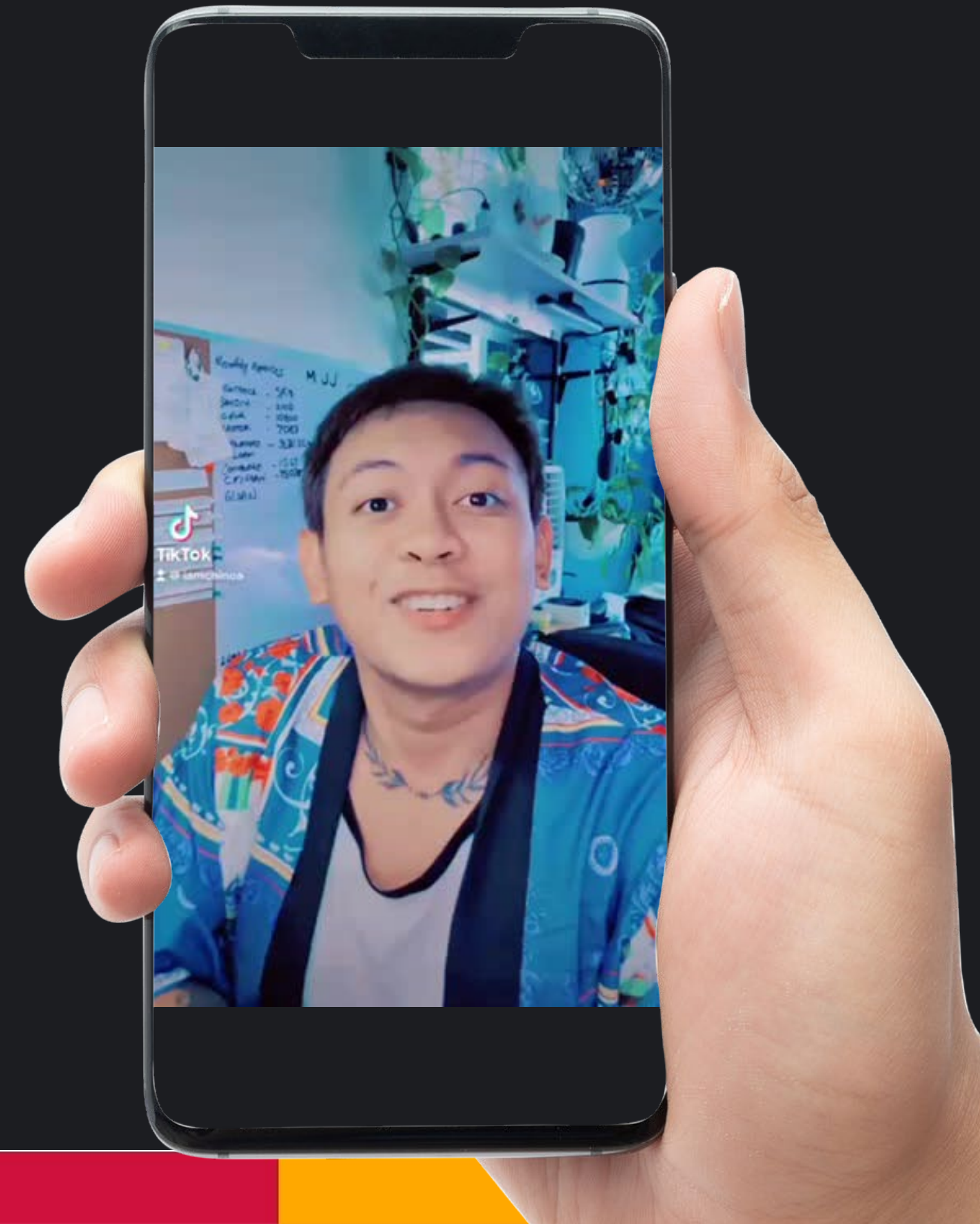
The only camera and editing app that automatically transcribes, captions, and clips your taking videos for you

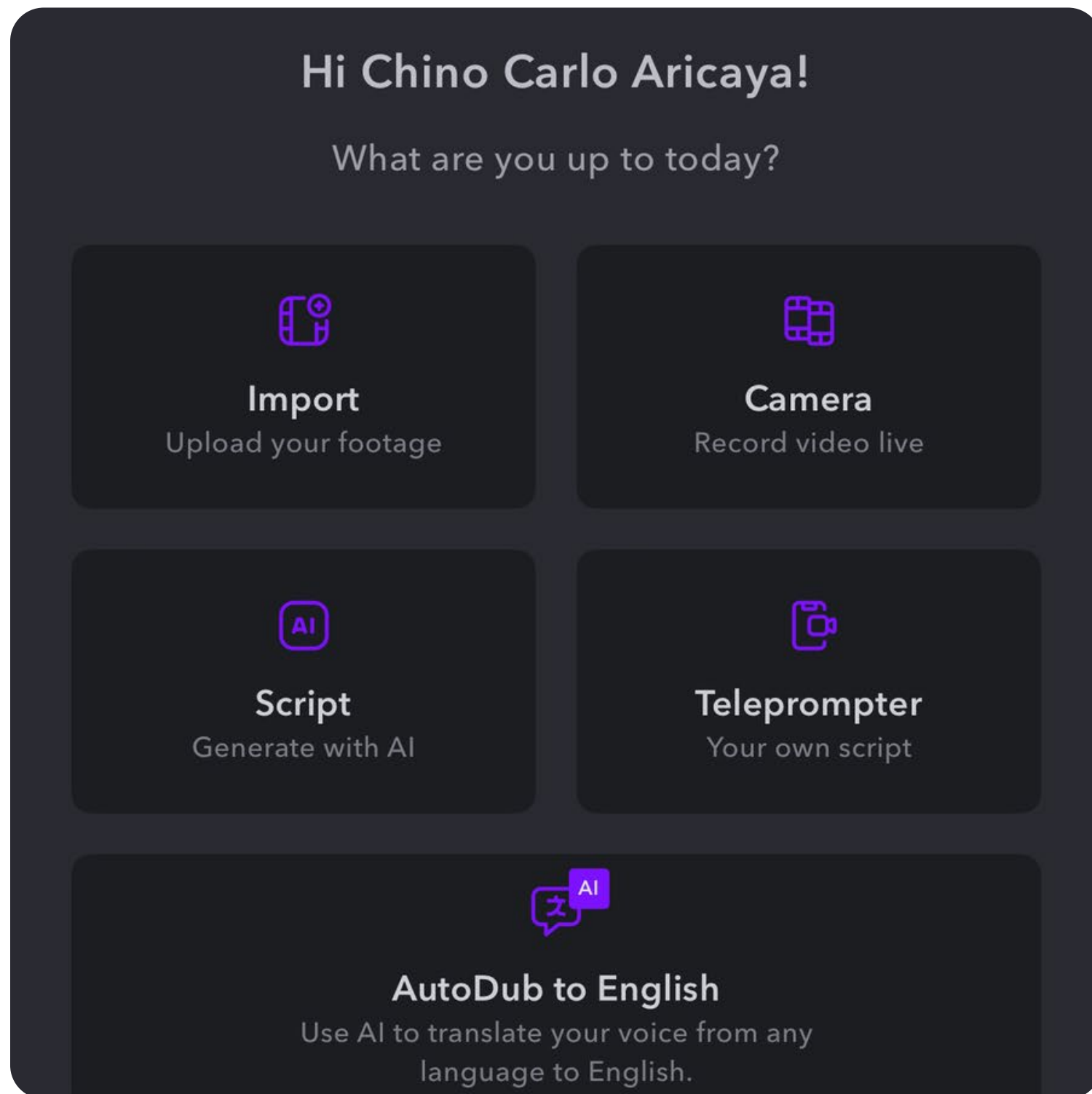


The all-in-one AI powered creator studio

Life, Camera, Action

Say hello to Captions, the only camera and editing app that automatically transcribes, captions and clips your talking videos for you.





ONE TAP IS
ALL IT TAKES!

It took me around 5 minutes to create that video from scratch

Video Script Text

TEMPLATE

Auto
Nothing specific

TikTok / Reels
Short videos for
TikTok or Reels with
engaging scripts

Youtube
Short videos
designed for
YouTube Shorts

VIDEO DESCRIPTION

i want to do a presentation on Captions capabilities to my bosses. i want to sell the importance of the app for social media content creation

KEYWORDS

Add any keyword that may be related

TONE OF VOICE

LET AI WRITE

THE SCRIPT!

- Indicate purpose (I chose a business pitch)
- Describe what the video is about
- Add relevant keywords
- Choose the tone of voice
- Choose Language

*Our VEAs spend at least 2 hours writing a script for a 2 minute video

growing, competitive field. To keep up with the competition, you need to ensure your content stands out from the rest. This is where Captions comes in; it's the perfect tool for creating compelling content for your social media channels.

So, let's dive in and take a look at some of the features and capabilities it provides.



Try Push Notification Teleprompter

Our teleprompter will send you what to say using push notifications.

Use the camera in TikTok, Instagram or any other app to record.

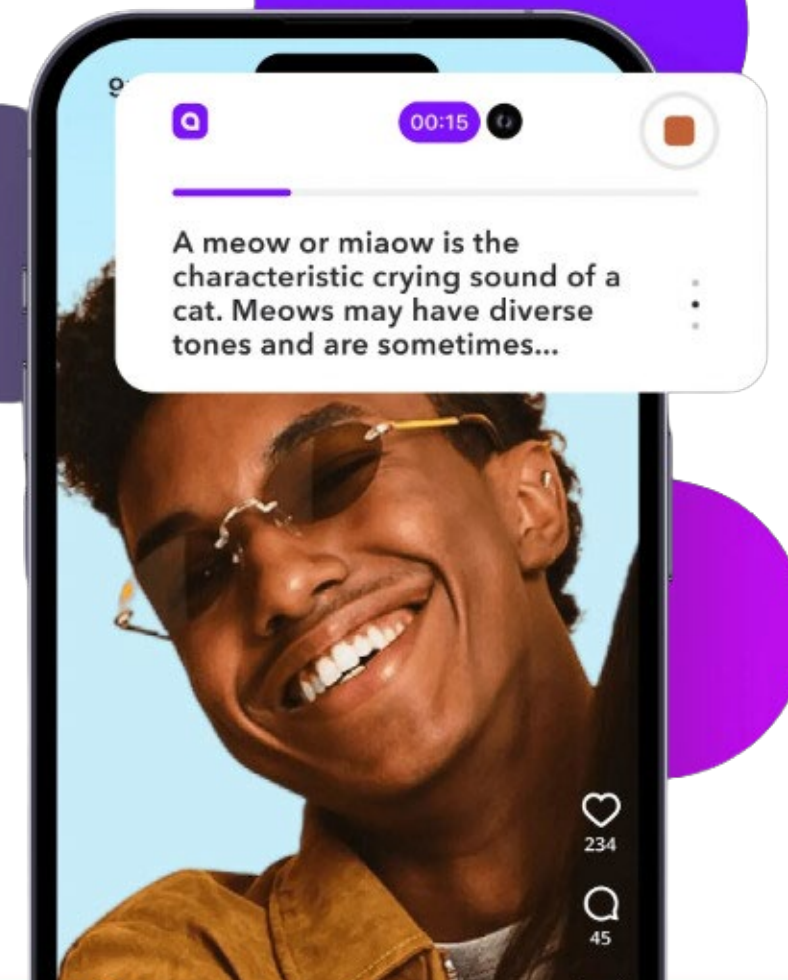
Use Captions Camera

Enable Push

FEED TO THE

TELEPROMPTER!

- Choose your camera
- Hit Record
- Read the push notifications



Video Script Text

TEMPLATE

- Auto
Nothing specific
- TikTok / Reels
Short videos for TikTok or Reels with engaging scripts
- Youtube
Short videos designed for YouTube Shorts

VIDEO DESCRIPTION

i want to do a presentation on Captions capabilities to my bosses. i want to sell the importance of the app for social media content creation

KEYWORDS

Add any keyword that may be related

TONE OF VOICE

Rendering...
This process may take up to a minute

Cancel

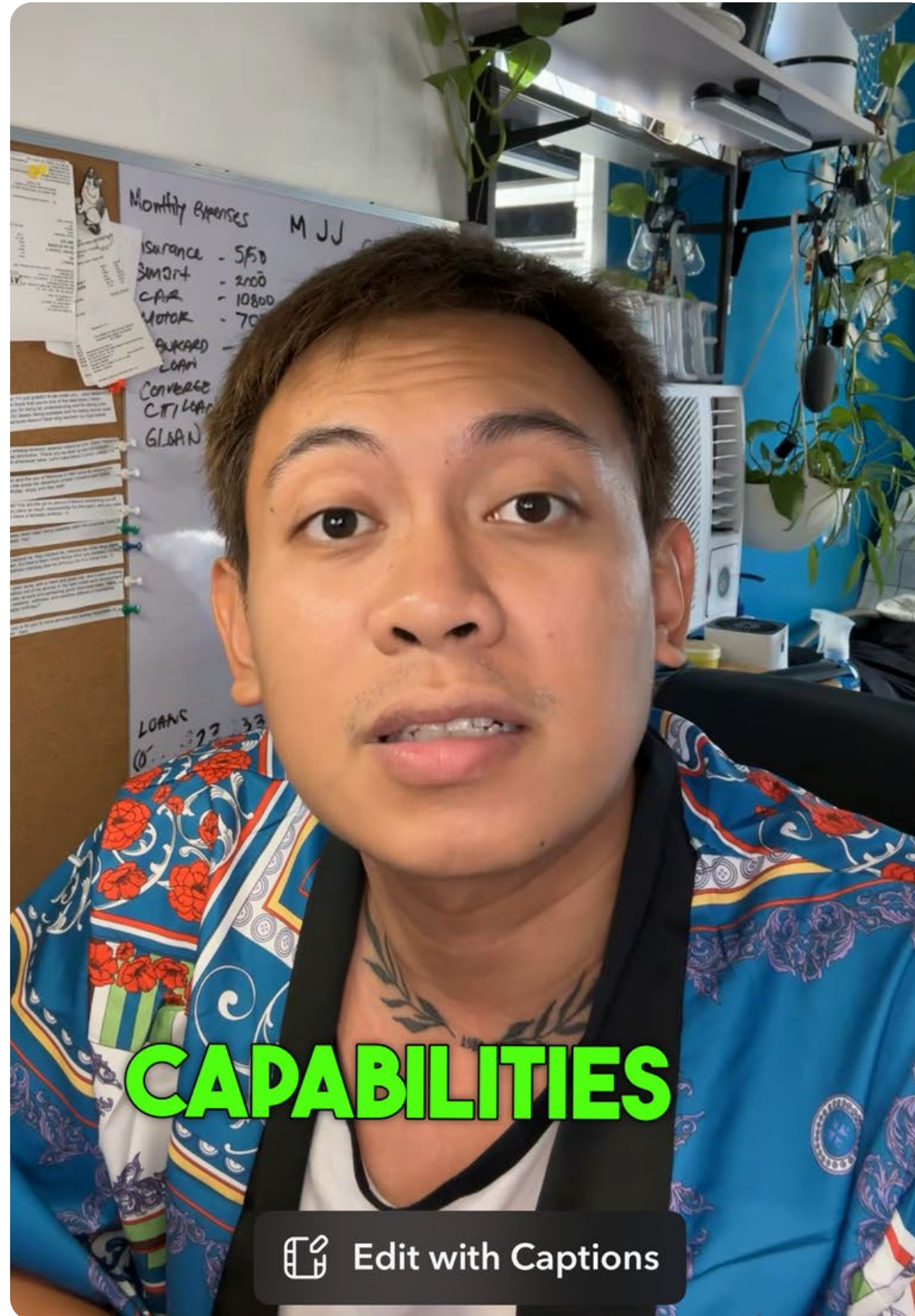
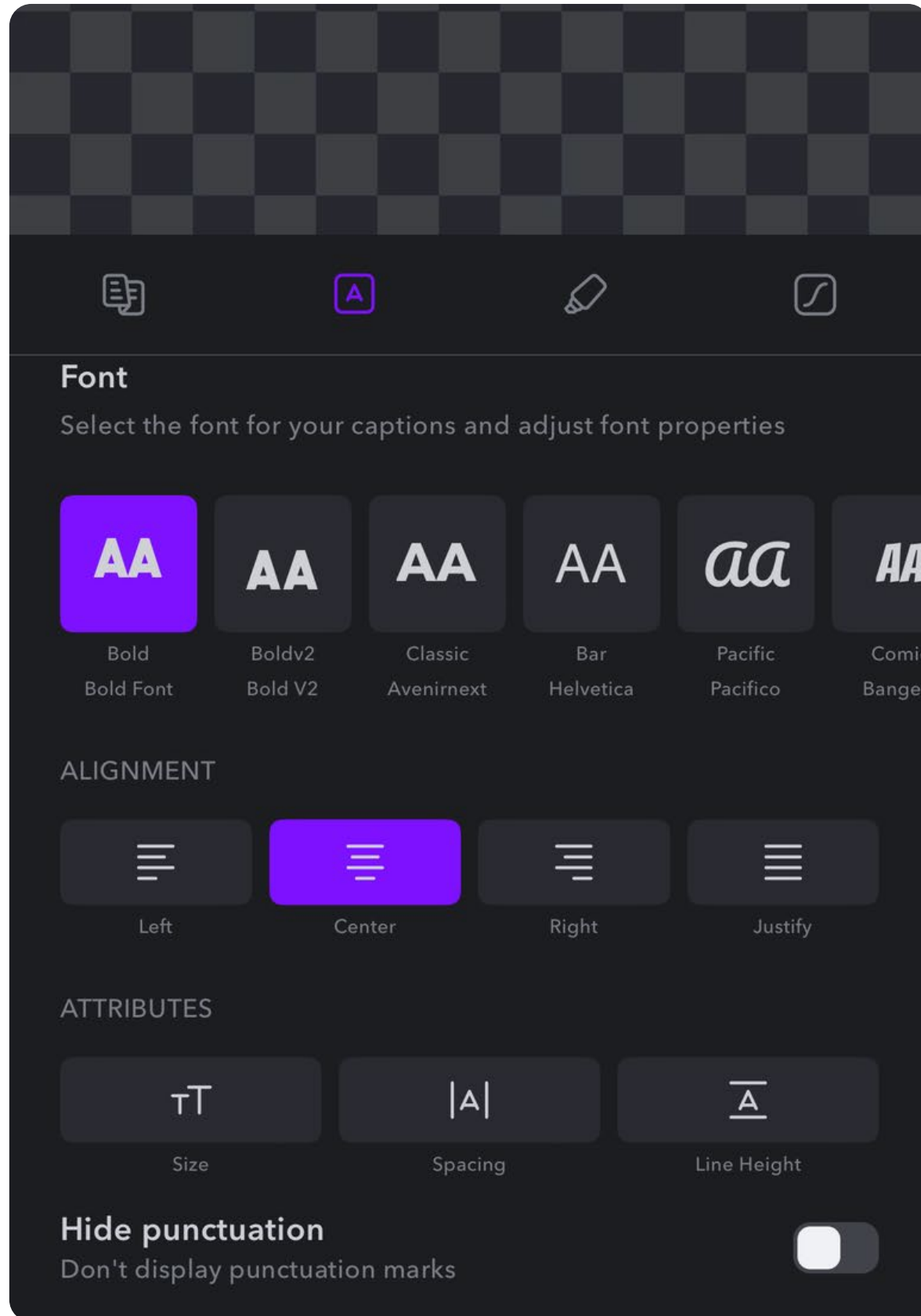
AI Emphasis NEW
Automatically add emphasis to words

Auto Censor
Automatically bleep curse words

LET AI DO THE
RENDERING FOR YOU!!!

Change what you're saying

- Record audio
- Overdub
- Import audio
- Translate



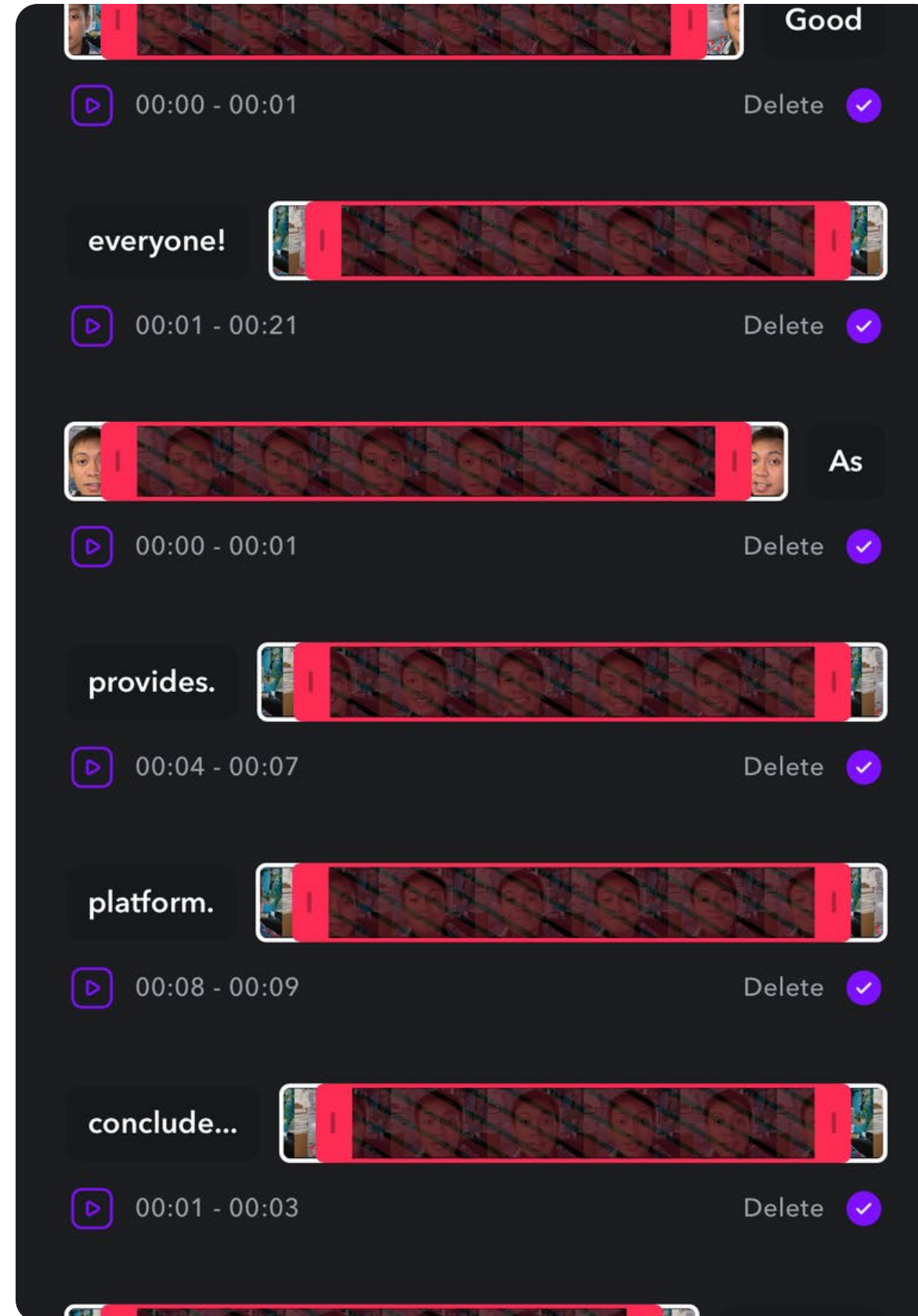
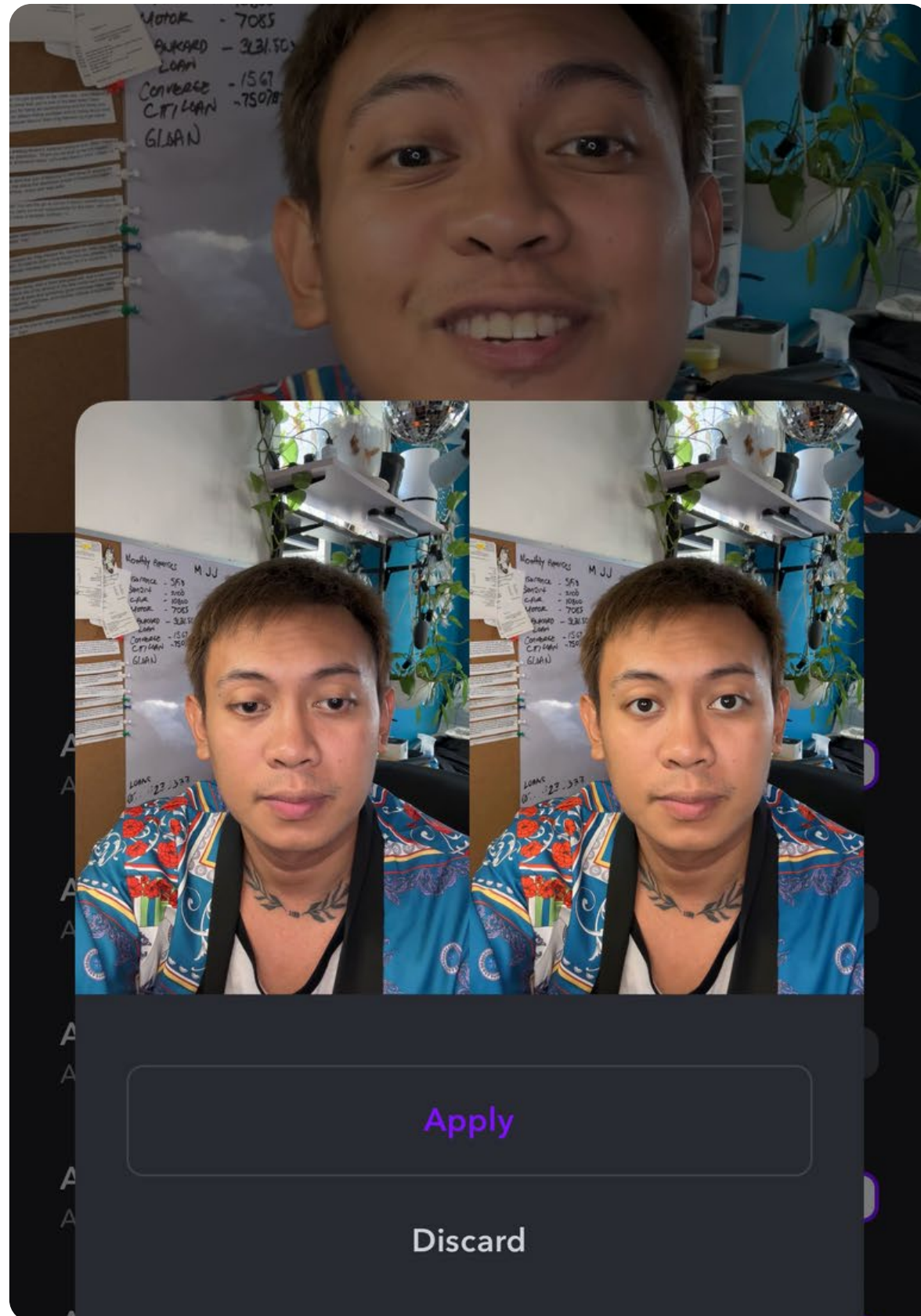
AI CAPTIONS

AI Images (Beta)

AI Emphasis (Beta)

Auto Emoji

- Choose how you want the captions to look like
- Select where you want to place the captions
- Remove/Edit the captions
- Delete/ change emojis and images



AI EYE CONTACT (BETA) AI Trim AI Censor (Beta)

- AI will make it appear that you are not reading from a teleprompter/script
- AI will trim away dead air and "umms"
- It will also remove bad words :)
- Choose video format/ orientation



SAVE



Save Project

Close project to edit later

EXPORT



4K at 60fps

Like at the movies

HDR

4K Resolution

Best for larger screens



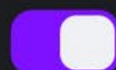
60 Frames per Second

Best for slow motion



High Dynamic Range

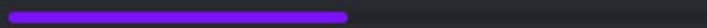
Best for Instagram



Exporting

48% completed

Please do not exit the app or lock your screen



60 Frames per Second

Best for slow motion



High Dynamic Range



EXPORT

YOUR VIDEO



by upgrading to Captions PRO



captions

PRO

Automatically transcribe, caption and clip your talking videos.



Monthly

\$8 per month

\$7.99



Yearly

\$5 per month

\$54.99

Try 3 Days Free

\$7.99/month after trial ends

BEFORE

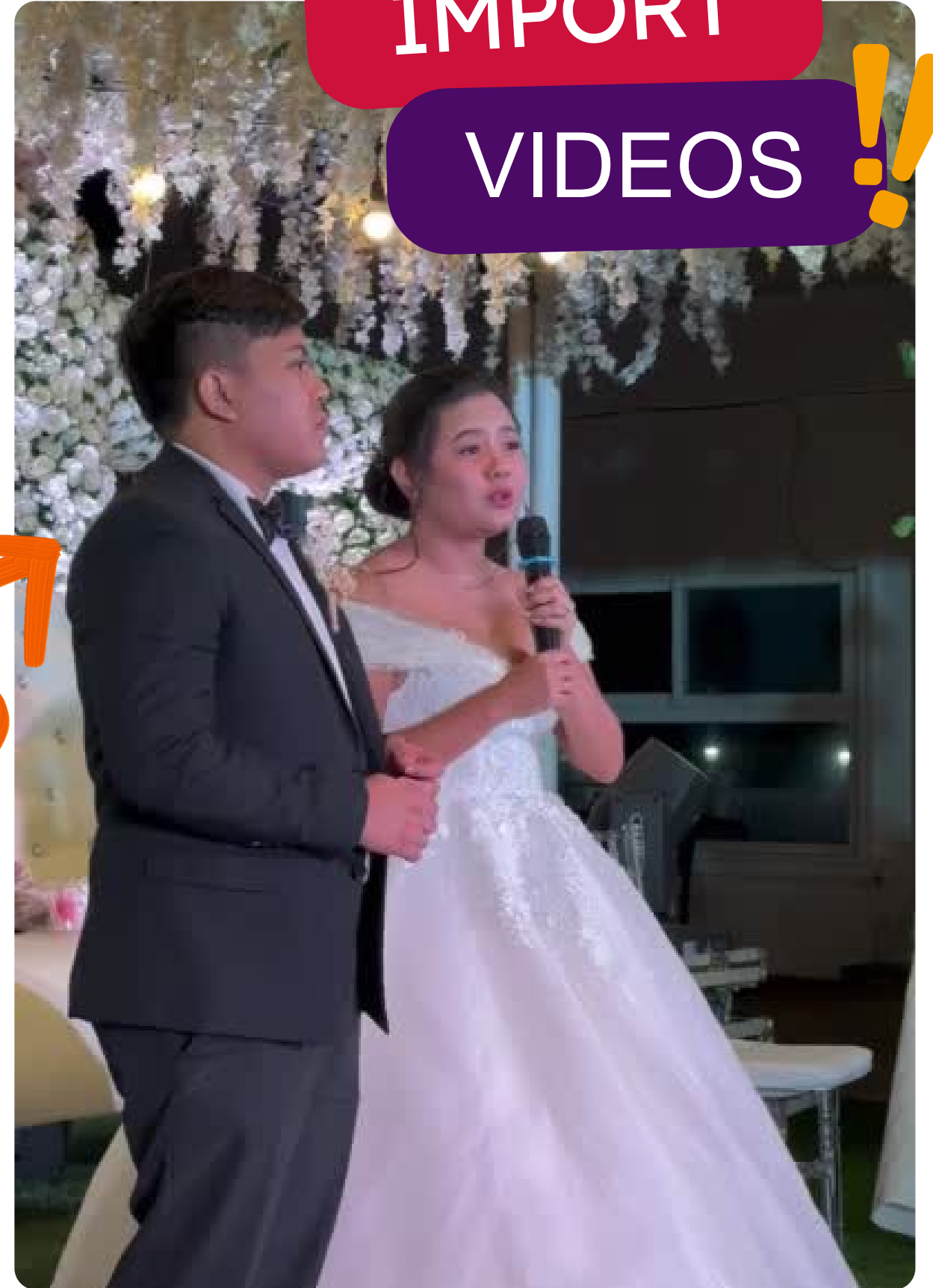


AFTER



IMPORT
VIDEOS

AI-powered background noise removal and dynamic head tracking + Auto translate and Auto dub to English (Beta)



Why do we need to add captions to our videos?

<https://www.ai-media.tv/ai-media-blog/4-reasons-you-definitely-need-to-caption-your-videos/>



Make your content easy to engage with (without sound)

83 % of media consumers in the US watch videos with the sound turned off. And not only that – 80% of people are also more likely to watch an entire video when captions are available, instead of just watching the beginning or skipping through.



Boost audience attention and comprehension

Videos with captions have a [longer viewing time](#). Captions also boost learning retention and extends viewership to people who don't have English as the primary language and vice-versa



Improve the accessibility of your content

Over 5% of the world's population has significant hearing loss. That is a huge number of people – roughly 460 million – that don't have access to our content if you don't use captions.



Maximize your SEO and content with transcripts

Search engines can't watch or listen to a video and index the content, but they do index text – transcripts. This is why, whenever we caption, we should make our video transcript or highlights available so we will rank higher, leading to more views and exposure for our content.



AI

**WEBSITE DESIGN AND
PRODUCTIVITY**



univer.se

[HTTPS:// UNIVER.SE/](https://univer.se/)

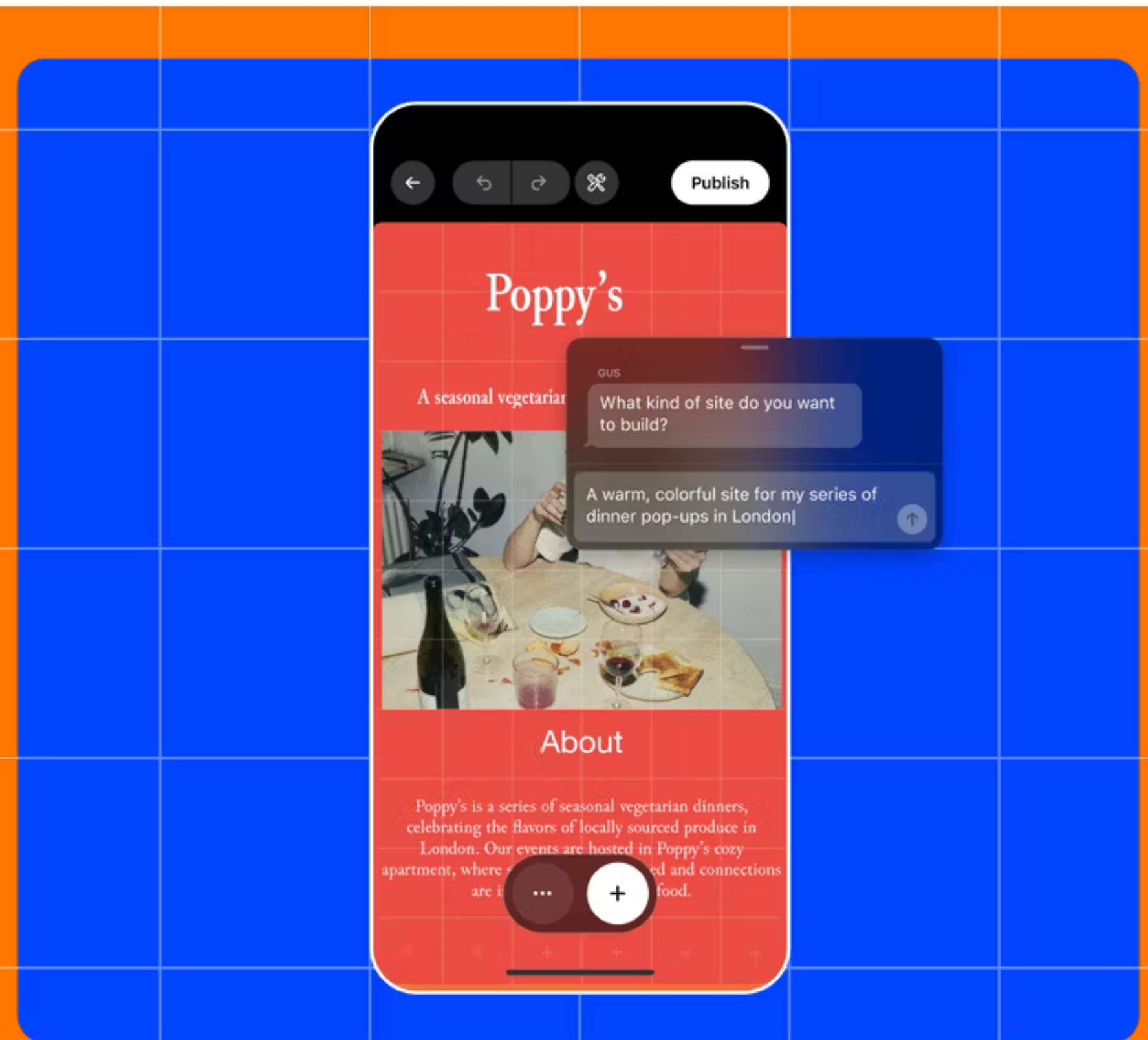
Build a custom website from anywhere.

No code is needed.

Use AI to generate bold websites in minutes, build on top of designer templates, or start from scratch.

Sell anything, from physical goods to digital downloads.

Grow your audience with built-in analytics and powerful integrations.

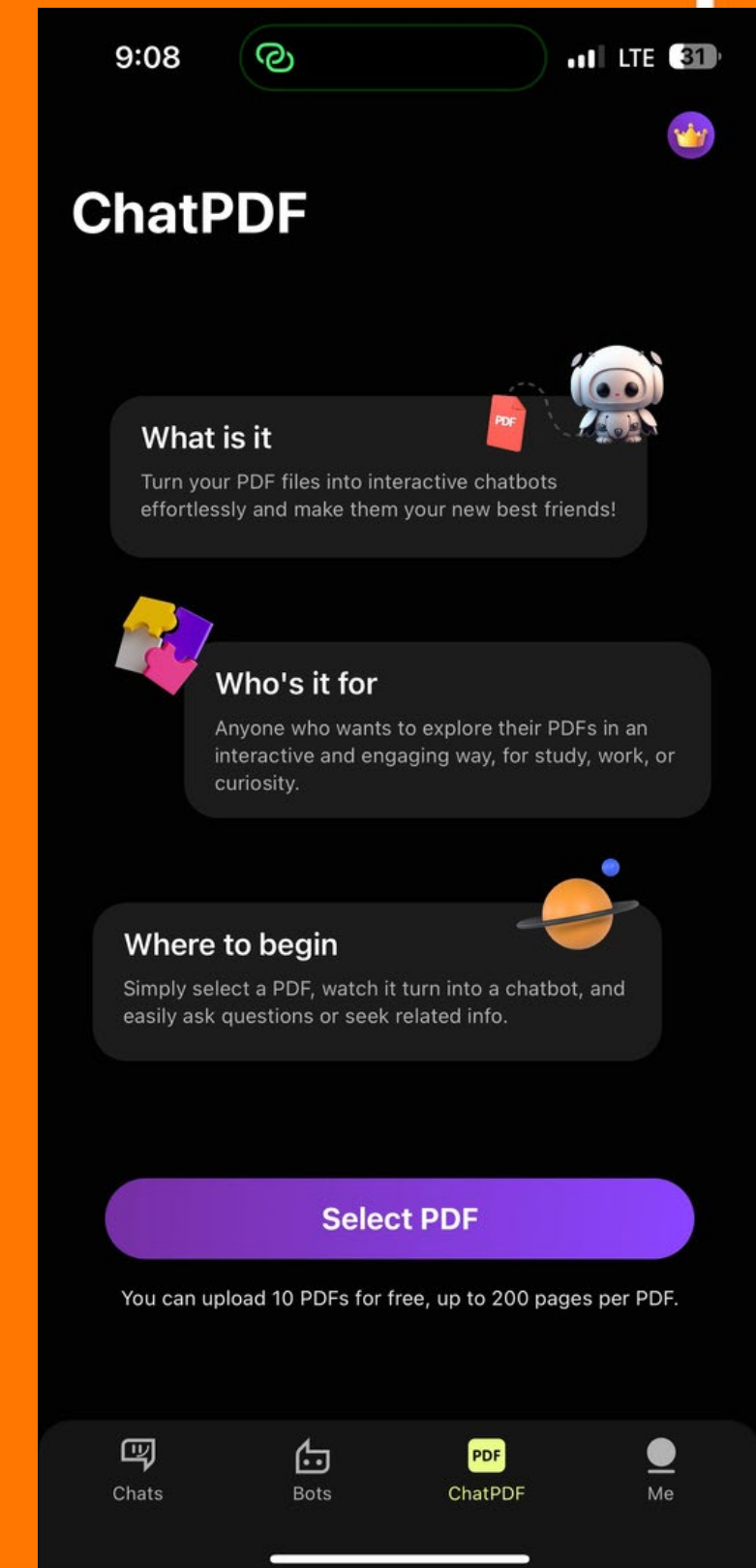
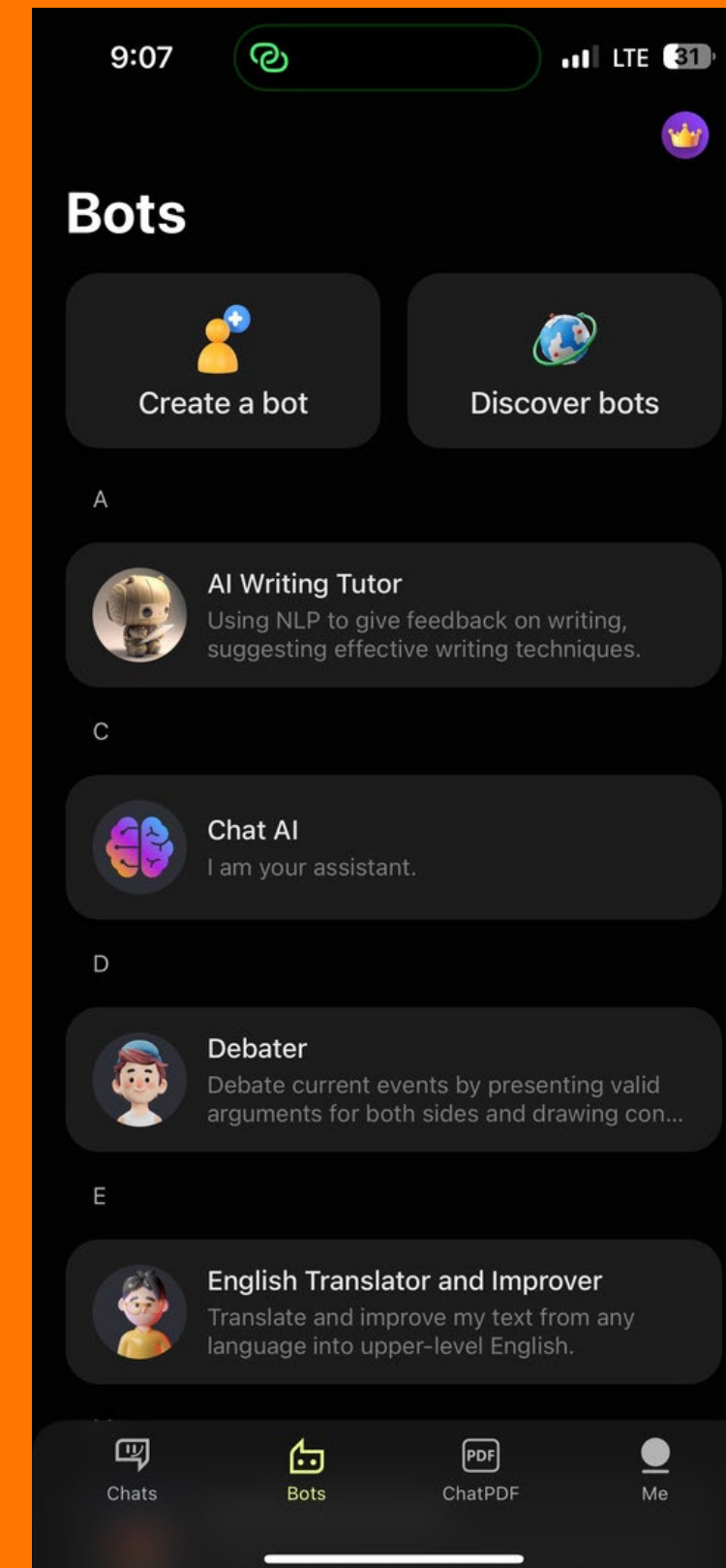
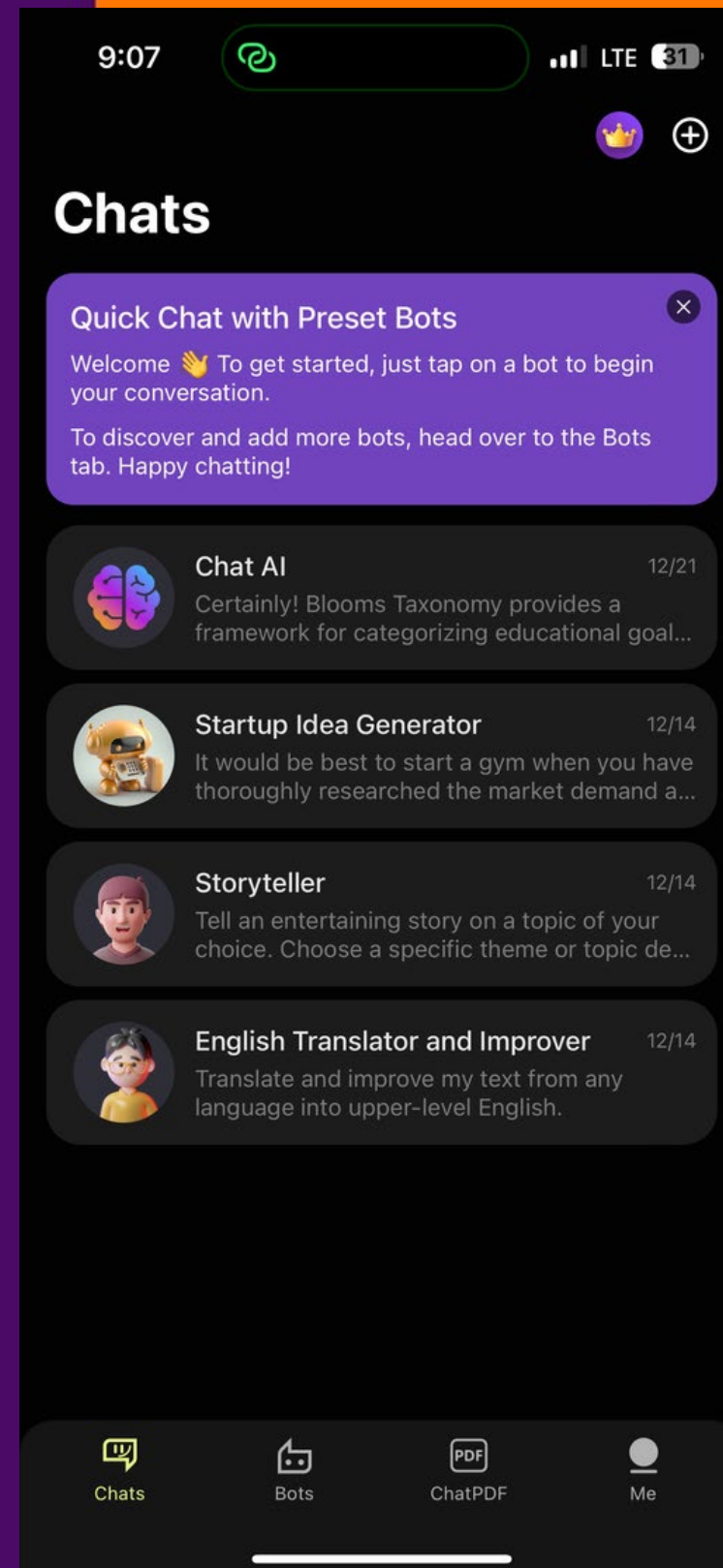


Sider.ai

AI ASSISTANT

Sider, the most advanced AI assistant, helps you to chat, write, read, translate, explain, test to image with AI.

<https://sider.ai>



GENERATIVE AI APPLICATION

Activity :

Create marketing materials for your business using only AI tools.

Follow any of these instructions:

Using Chatgpt or a similar app, write possible taglines/ business pitch/ slogans/ song lyrics etc for your business

Using NightCafe or a similar app, create a poster/ promotional material/ logo concept/ song image cover etc for your business

Using Runway or a similar app, make a promotional video for your business/ product

Present to the class your output for peer evaluations / recommendations

Part 3:

Integrating AI into Creative Workflows



AI FOR PRODUCTIVITY

Data Analysis and Insights

- **Big Data Analytics:** AI can analyze vast amounts of data quickly, identifying patterns, trends, and insights that can inform business decisions.
- **Predictive Analytics:** AI models can predict future trends, helping organizations make proactive decisions.
- **Market Research:** AI can analyze market data, customer feedback, and competitor activities to provide actionable insights.

Finance and Accounting

- **Automated Bookkeeping:** AI can handle bookkeeping tasks, such as invoice processing, expense tracking, and financial reporting.
- **Fraud Detection:** AI can detect unusual patterns and potential fraud, enhancing security and compliance.
- **Financial Analysis:** AI can analyze financial data, providing insights and recommendations for budgeting and investment.



AI FOR PRODUCTIVITY

Sales and Marketing

- **Lead Generation:** AI can identify potential leads based on data analysis, improving the efficiency of sales teams.
- **Personalized Marketing:** AI can create personalized marketing campaigns tailored to individual customer preferences and behaviors.
- **Sales Forecasting:** AI can predict sales trends and customer demand, helping businesses plan and strategize more effectively.

Project Management

- **Task Automation:** AI can automate project management tasks, such as assigning tasks, tracking progress, and sending reminders.
- **Resource Allocation:** AI can optimize the allocation of resources based on project needs and team availability.
- **Risk Management:** AI can identify potential risks and suggest mitigation strategies to keep projects on track.



AI FOR PRODUCTIVITY

Human Resources

- **Recruitment:** AI can screen resumes, conduct initial interviews, and assess candidates, speeding up the hiring process.
- **Employee Onboarding:** AI can automate onboarding processes, providing new hires with necessary information and training materials.
- **Performance Management:** AI can track employee performance, provide feedback, and identify areas for improvement.

Supply Chain and Inventory Management

- **Demand Forecasting:** AI can predict demand for products, optimizing inventory levels and reducing waste.
- **Logistics Optimization:** AI can optimize routes, schedules, and delivery processes, improving efficiency and reducing costs.
- **Quality Control:** AI can monitor production processes and identify defects, ensuring high-quality outputs.



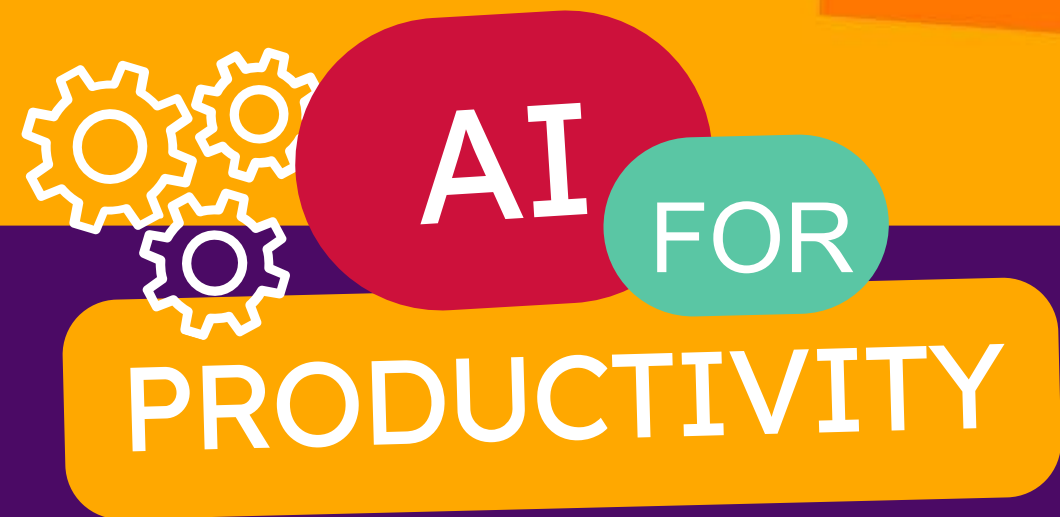
AI FOR PRODUCTIVITY

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AI FOR
PRODUCTIVITY

MINI ACTIVITY:

Develop a plan for integrating an AI tool into your own creative workflow, outlining the steps, resources needed, and expected benefits.

Part 4:

Future Trends and Innovations

“AI is estimated to create 133 million new jobs by
2030.”

The graphic features the text "AI (R)evolution" in white. "AI" is inside a red rounded rectangle, and "(R)evolution" is inside a purple rounded rectangle. A purple flag on a yellow pole is positioned to the left of the red rectangle. Below the text is a large yellow fist icon, and at the bottom, a yellow silhouette of a crowd celebrating with flags and a banner.

AI (R)evolution

The future of AI promises to bring transformative changes across various sectors, driven by advancements in technology, increasing data availability, and evolving societal needs. Here are some key trends and innovations to watch for in the realm of AI:

A graphic featuring a purple flag on a yellow pole, with the letters 'AI' in white on a red circular background. To the right, the text '(R)evolution' is written in white on a dark purple rounded rectangular background.

AI (R)evolution

Explainable AI (XAI)

- **Transparency and Trust:** As AI systems become more complex, there is a growing demand for models that can explain their decisions in understandable terms, fostering trust and accountability.
- **Regulatory Compliance:** Explainable AI is crucial for meeting regulatory requirements, especially in industries like finance and healthcare, where decisions can have significant impacts.

AI Ethics and Governance

- **Ethical AI:** There will be a stronger focus on developing ethical AI frameworks to ensure that AI systems are fair, unbiased, and respect user privacy.
- **AI Governance:** Establishing clear guidelines and policies for AI development and deployment to prevent misuse and ensure responsible usage.

The graphic features a purple flag on a yellow pole. The flag is positioned over a red oval containing the letters 'AI' in white. To the right of this oval is a dark purple rounded rectangle containing the text '(R)evolution' in white. The background consists of a white central area with orange, purple, red, and yellow horizontal bands at the top and bottom.

AI

(R)evolution

Human-AI Collaboration

- **Augmented Intelligence:** AI will increasingly be used to augment human capabilities rather than replace them, enhancing productivity and decision-making.
- **Collaborative Robots (Cobots):** Robots designed to work alongside humans, improving efficiency in manufacturing, healthcare, and other industries.

AI in Education

- **Personalized Learning:** AI-driven platforms will offer personalized learning experiences, adapting to the needs and pace of each student.
- **Intelligent Tutoring Systems:** AI tutors that provide real-time feedback and support to students, enhancing the learning process.

The graphic features a purple flag on a yellow pole, with the letters 'AI' in white on a red circular background. To the right, the text '(R)evolution' is written in white on a dark purple rounded rectangular background. The top of the slide has a decorative header with orange, purple, red, and yellow vertical stripes.

AI

(R)evolution

AI in Healthcare

- **Personalized Medicine:** AI will enable more precise and personalized treatment plans based on individual genetic, environmental, and lifestyle factors.
- **Disease Prediction and Prevention:** Advanced AI models will predict disease outbreaks and assist in preventive healthcare measures.
- **AI in Drug Discovery:** Accelerating the drug discovery process by identifying potential drug candidates more quickly and accurately.

Natural Language Processing (NLP)

- **Advanced Conversational Agents:** AI-driven chatbots and virtual assistants will become more sophisticated, capable of understanding and generating human-like responses.
- **Multilingual AI:** Improvements in NLP will allow AI systems to understand and translate multiple languages more accurately, facilitating global communication.

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AI

(R)evolution

Autonomous Systems

- **Self-Driving Vehicles:** Continued advancements in autonomous driving technologies, with potential widespread adoption in public transportation and logistics.
- **Drones and Delivery Robots:** Increased use of AI-powered drones and robots for delivery services, surveillance, and disaster response.

AI in Creative Industries

- **Generative Design:** AI systems that create novel designs and solutions in architecture, fashion, and product design.
- **AI-Generated Content:** Continued innovation in AI-generated art, music, and literature, expanding creative possibilities.

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AI

(R)evolution

AI for Environmental Sustainability

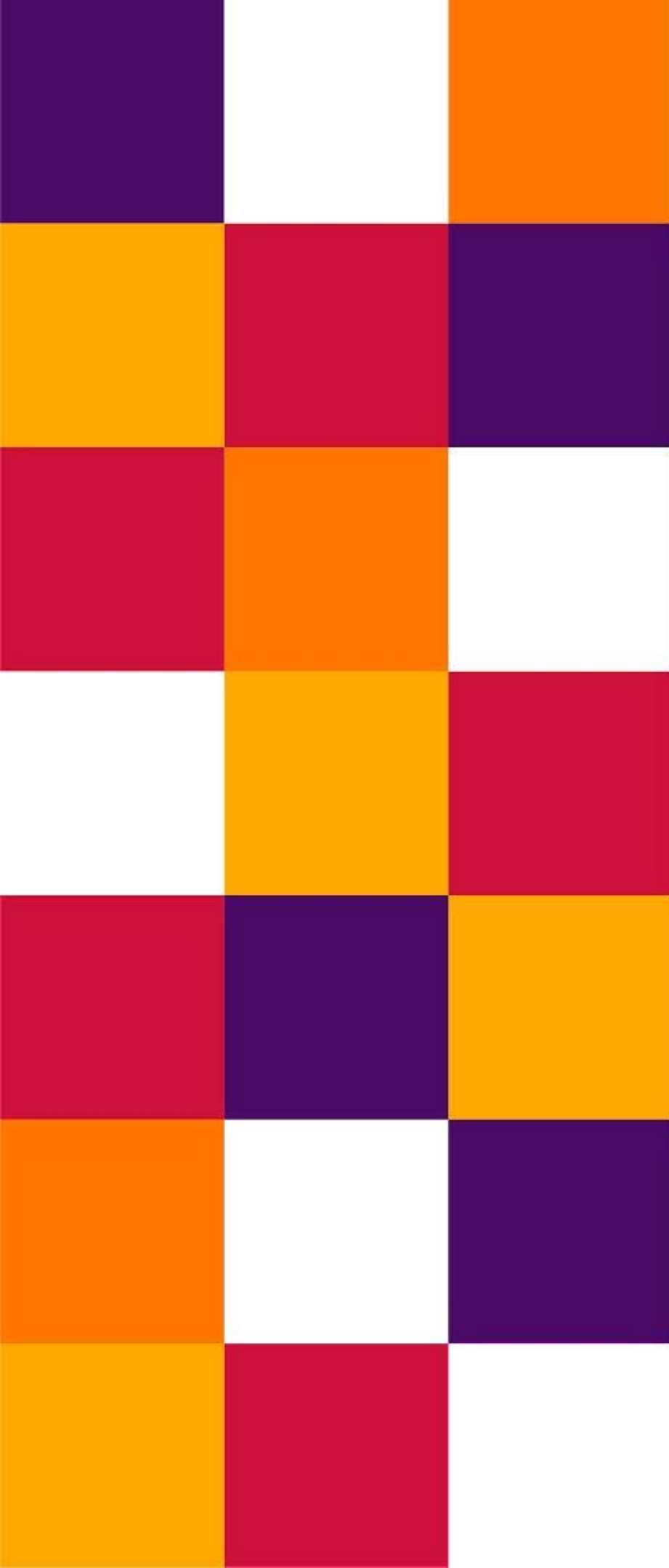
- **Climate Modeling:** Using AI to improve climate models, predict environmental changes, and develop strategies for mitigation and adaptation.
- **Resource Optimization:** AI-driven solutions for optimizing resource use in agriculture, energy, and water management.

AI Democratization

- **Accessible AI Tools:** Increasing availability of user-friendly AI tools and platforms that enable non-experts to develop and deploy AI solutions.
- **Open-Source AI:** Growth of open-source AI communities and resources, fostering innovation and collaboration.

Part 5:

Ethical and Legal Considerations







Bias and Fairness

- **Data Bias:** AI systems can inherit biases present in the training data, leading to unfair or discriminatory outcomes.
- **Algorithmic Fairness:** Ensuring that AI algorithms treat all users equitably, regardless of race, gender, age, or other protected characteristics.

Transparency and Explainability

- **Black Box Problem:** Many AI models, especially deep learning systems, operate as "black boxes," making their decision-making processes opaque. Black Box Problem is the inability to fully understand an AI's decision-making process and therefore the inability to predict the AI's decisions or outputs.
- **Explainable AI:** Developing methods to make AI decisions transparent and understandable to users and stakeholders.



Privacy and Data Protection

- **Data Privacy:** Ensuring that AI systems comply with data privacy regulations and protect user information.
- **Informed Consent:** Users should be informed about how their data is collected, used, and shared by AI systems.

Accountability and Responsibility

- **Liability:** Determining who is responsible when an AI system causes harm or makes a mistake.
- **Ethical AI Development:** Establishing ethical guidelines for AI developers to follow during the creation and deployment of AI systems.



Human-AI Interaction

- **Autonomy and Control:** Ensuring that humans retain control over AI systems and can intervene when necessary.
- **Human-Centered Design:** Designing AI systems that prioritize human well-being and values.

Impact on Employment

- **Job Displacement:** Addressing the potential for AI to displace jobs and developing strategies to support affected workers.
- **Skills Development:** Investing in education and training programs to prepare the workforce for AI-driven changes.

Approximately 75% of individuals are concerned about job loss due to AI.



Regulation and Compliance

- **Regulatory Frameworks:** Governments and regulatory bodies are developing frameworks to govern the use of AI, such as the European Union's AI Act.
- **Compliance Requirements:** Organizations must ensure that their AI systems comply with relevant laws and regulations.

Intellectual Property

- **AI-Generated Works:** Determining the ownership and intellectual property rights for content created by AI.
- **Patentability:** Addressing challenges related to patenting AI innovations and inventions.



LEGAL
CONSIDERATIONS

Consumer Protection

- **Misleading AI:** Ensuring that AI systems do not deceive or mislead consumers, especially in areas like deepfakes and automated content generation.
- **Product Liability:** Establishing clear guidelines for the liability of AI products and services that cause harm to consumers.



Synthetic and manipulated media policy

Overview

April 2023

You may not share synthetic, manipulated, or out-of-context media that may deceive or confuse people and lead to harm ("misleading media"). In addition, we may label posts containing misleading media to help people understand their authenticity and to provide additional context.

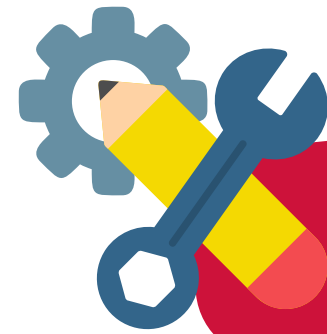


Ethical Use of AI in Sensitive Areas

- **Healthcare:** Ensuring that AI applications in healthcare adhere to ethical standards and do not compromise patient safety or privacy.
- **Criminal Justice:** Addressing the ethical implications of using AI in law enforcement and the justice system, such as predictive policing and sentencing algorithms.
- **Human Oversight:** Ensuring that humans remain in control of critical decisions in military operations involving AI.

International and Cross-Border Issues

- **Global Standards:** Promoting international cooperation to establish global standards and best practices for AI governance.
- **Cross-Border Data Flows:** Addressing legal challenges related to the cross-border flow of data used by AI systems.



RECENT

DEVELOPMENTS

AI Bill of Rights (<https://www.whitehouse.gov/ostp/ai-bill-of-rights/>)

US Initiative: The White House has proposed an AI Bill of Rights to guide the development and use of AI technologies, emphasizing principles such as privacy, transparency, and accountability.

EU AI Act (<https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>)

European Regulation: The European Union is working on the AI Act, which aims to regulate high-risk AI applications and ensure that AI systems used in the EU are safe, ethical, and trustworthy.

Facial Recognition Bans

Local Bans: Several cities and regions have enacted bans or moratoriums on the use of facial recognition technology by law enforcement and other government agencies.

AI Ethics Boards

Corporate Governance: Many organizations are establishing AI ethics boards and committees to oversee the ethical use of AI within their operations. Ex. <https://www.ibm.com/impact/ai-ethics>

Part 6:

Hands-on AI Application





FUTURE-PROOFING AND OPTIMIZATION WITH AI

Objective: To collaboratively brainstorm and identify ways AI can future-proof and optimize workflows and production within specific industries or business types.

Group Formation:

- Divide participants into groups based on their industry or type of business. Ensure that each group has a mix of roles and expertise for diverse perspectives.

Braintorming Session:

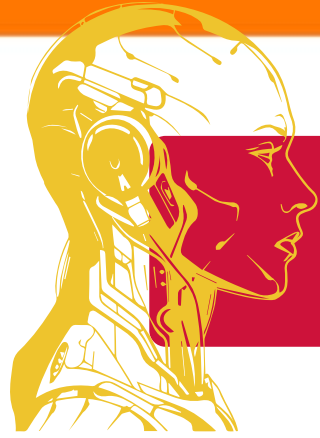
- List down current challenges and inefficiencies in their industry or business type.
- Next, brainstorm potential AI applications that could address these challenges. Think about different AI tools and technologies discussed in the module

Discussion and Prioritization:

- Discuss the feasibility and potential impact of each AI application idea. Consider factors like cost, ease of implementation, and expected benefits.
- Prioritize the AI applications based on their potential to future-proof the industry and optimize workflows. Rank them from most to least promising.

Presentation:

- Each group presents their findings to the rest of the participants. Encourage questions and discussions after each presentation.



FUTURE-PROOFING AND OPTIMIZATION WITH AI

Reflection and Feedback:

- Reflect on the ideas presented and discuss common themes and unique approaches.
- Provide constructive feedback to other groups, focusing on the practicality and innovation of their AI application ideas.

Facilitator Tips:

- Encourage participants to think creatively and not limit themselves to current technology constraints.
- Ensure that all group members participate and contribute their ideas.
- Provide examples or prompts if groups struggle to come up with AI applications.
- If time permits, allow groups to research or quickly explore AI tools online to support their brainstorming.



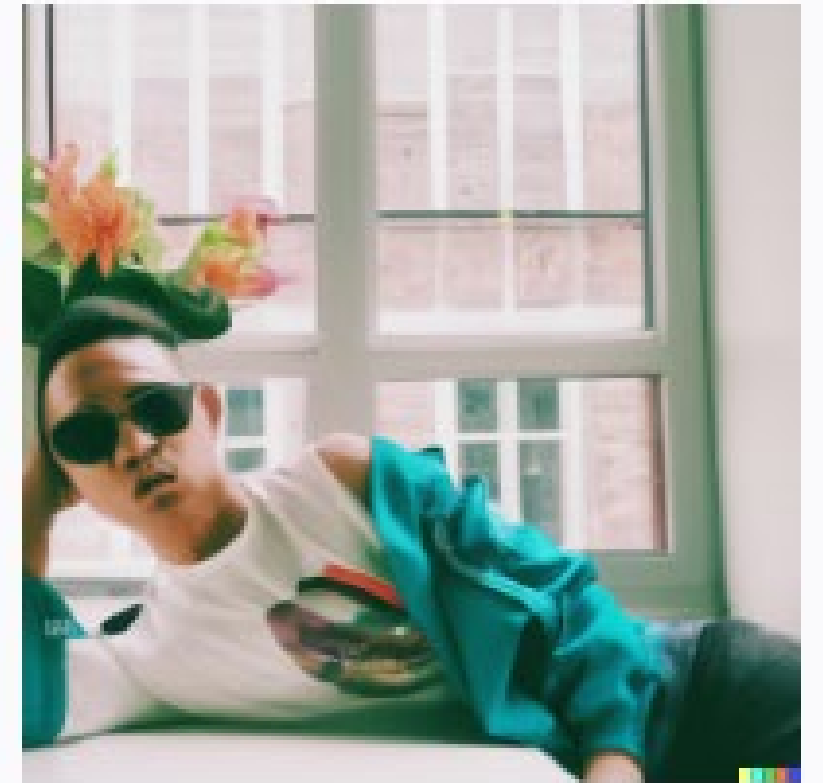
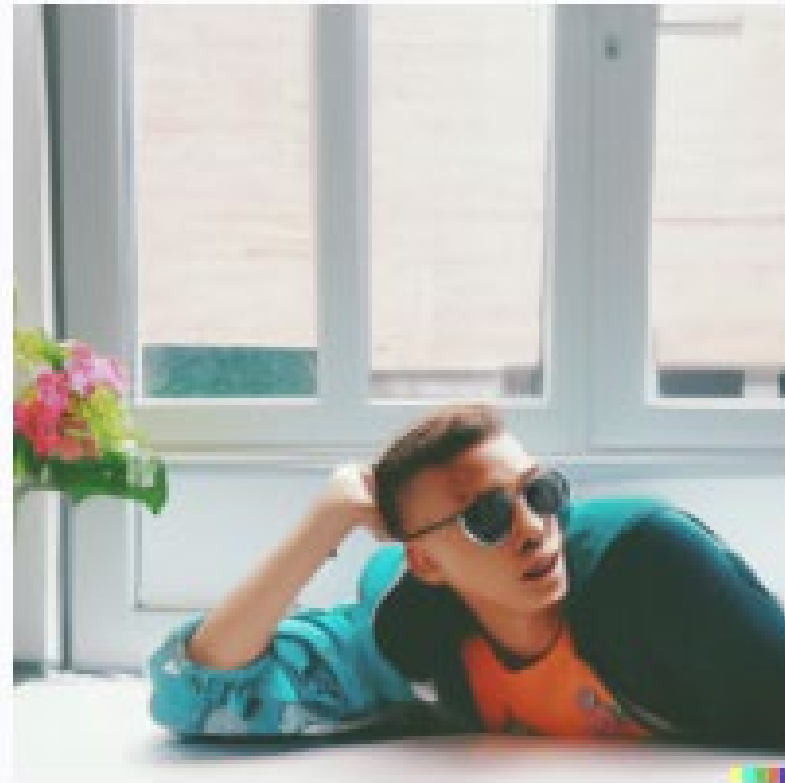
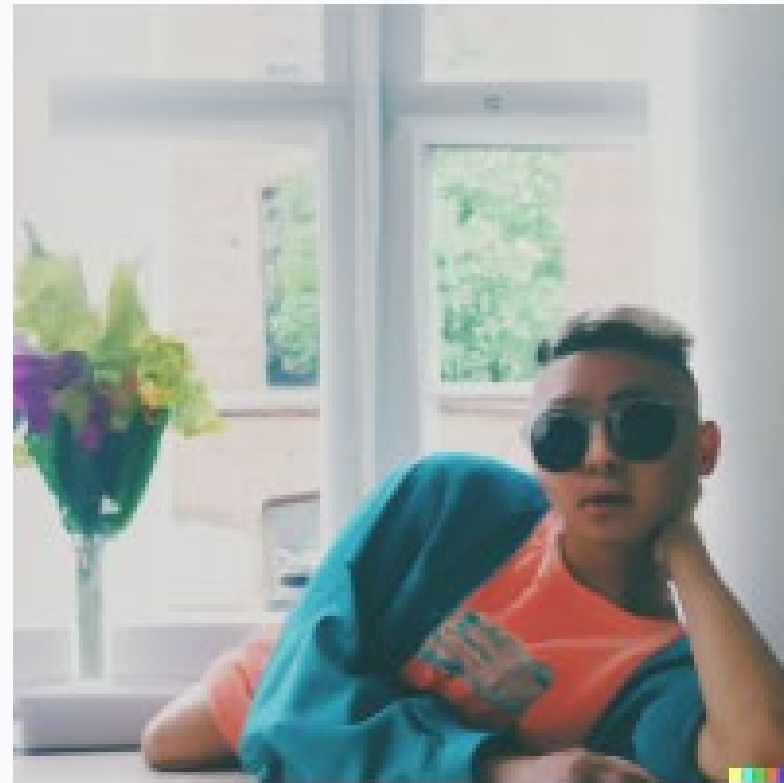
CHECK
IT OUT



AI Experiments

AI Experiments is a showcase for simple experiments that make it easier for anyone to start exploring machine learning, through pictures, drawings, language, music, and more.

<https://experiments.withgoogle.com/collection/ai>





Module 6

Eva l u a t i o n