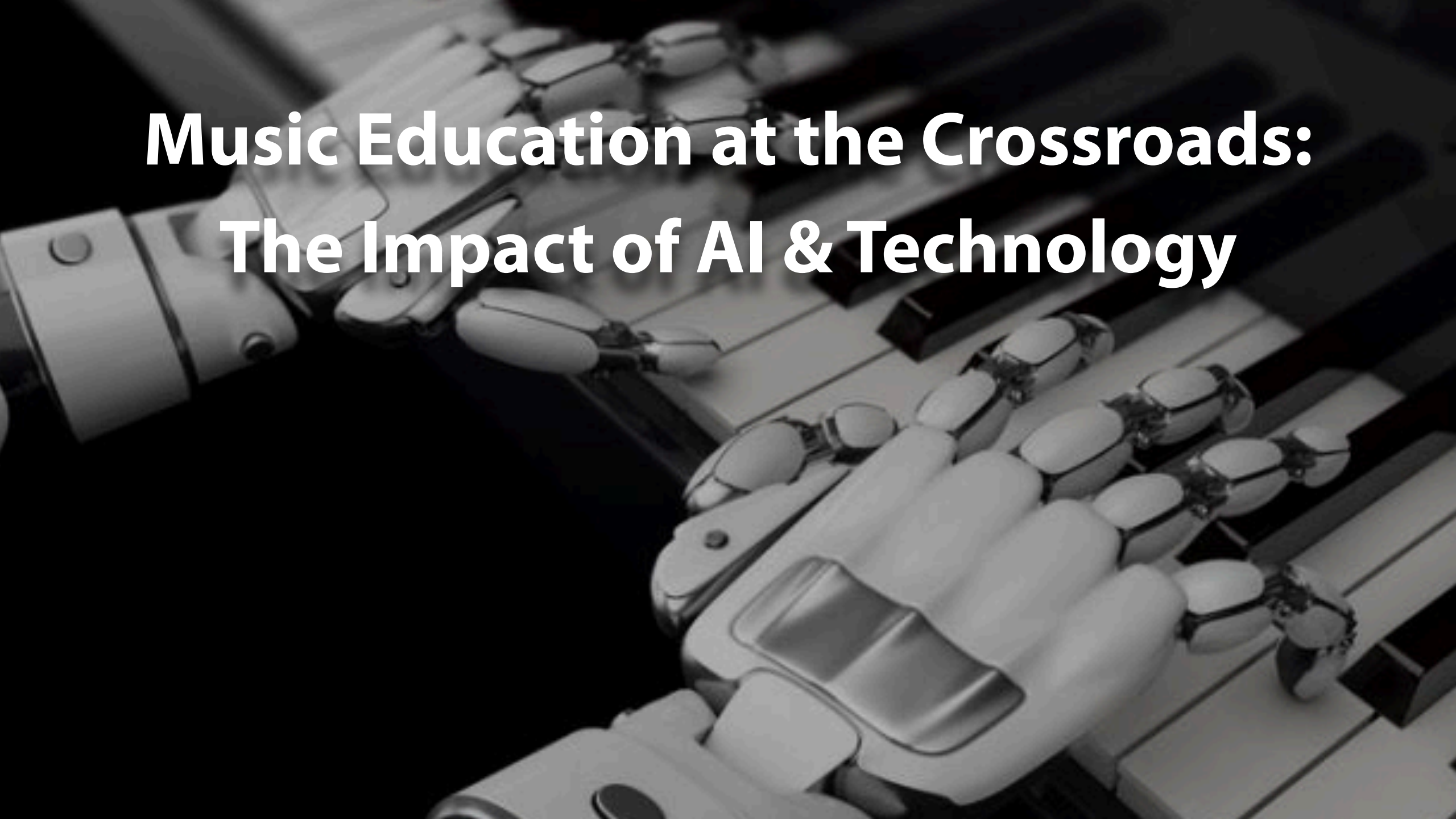
A grayscale image of a robotic hand with multiple joints and sensors, positioned over a piano keyboard. The hand is in the process of playing, with fingers extended over the keys. The background is dark and out of focus, emphasizing the hand and the keyboard.

Music Education at the Crossroads: The Impact of AI & Technology



A close-up, black and white photograph of a robotic hand with white, segmented fingers and a metallic wrist, positioned over a piano keyboard. The hand is in the process of playing, with several keys depressed. The lighting is dramatic, highlighting the mechanical details of the hand and the texture of the piano keys. The background is dark and out of focus, emphasizing the hand and the instrument.

Music Education at the Crossroads: The Impact of AI & Technology





**When it comes to AI, what are
you excited about?**





What are you nervous about?





A BIG AI Announcement...





PLAYGPT

Who needs to Practice?



PLAYGPT

Who needs to Practice?



Woodwinds



Brass



Strings



Percussion

Upload Music

Upload Music

Upload Music

Upload Music

Play Music

Play Music

Play Music

Play Music

Audition

Audition

Audition

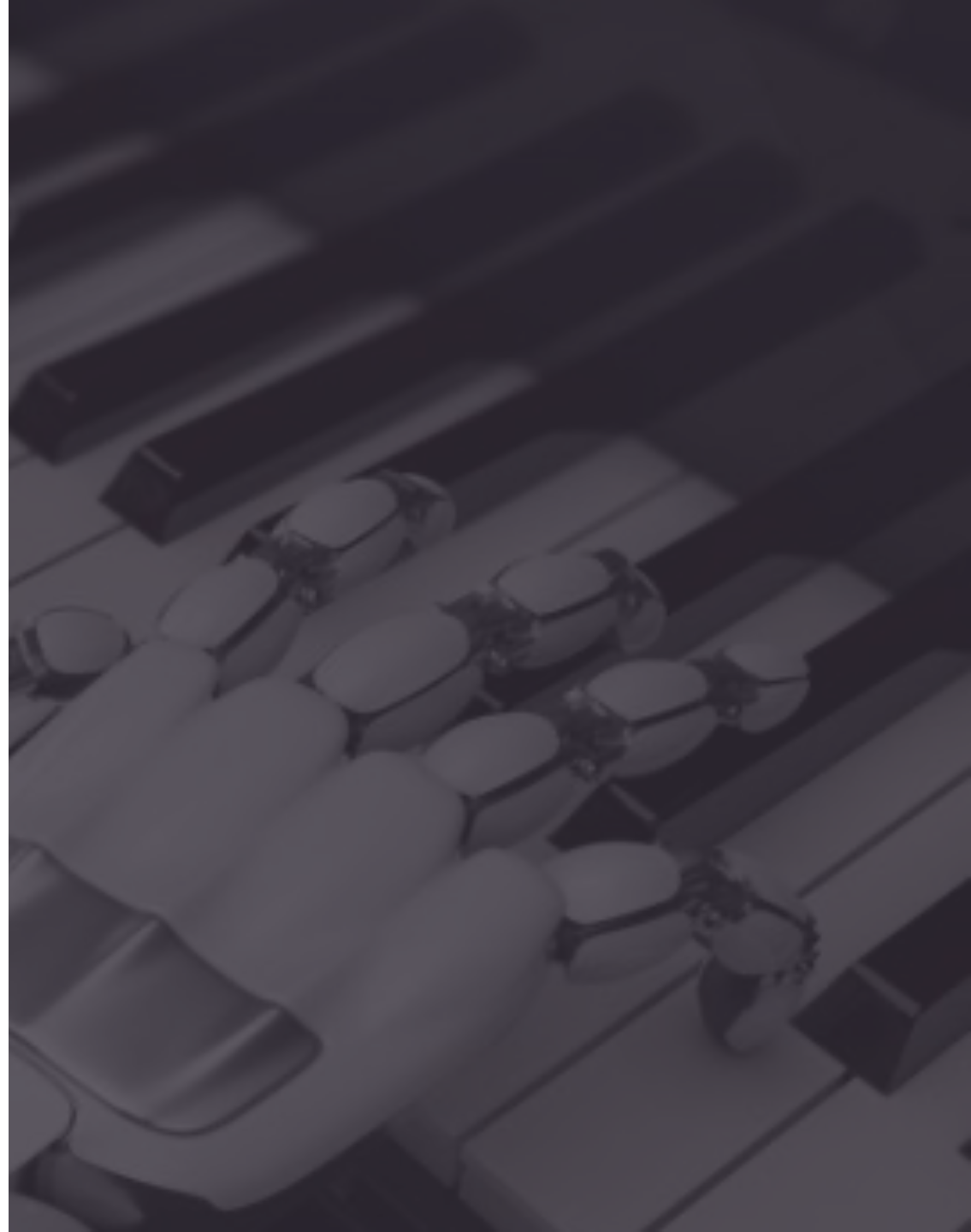
Audition







Play Gloves





**Play
Baton**



Play Face







But seriously...



WHAT IS A.I.?



- Artificial Intelligence

- Alan Turing - Oxford

- Arthur Samuel - MIT/Stanford

- John McCarthy - Stanford

- Marvin Minsky - MIT

- It's been around since the **1950's**

- Companies like Amazon, Facebook & Google have been using it for YEARS



Turing Test:

During the Turing Test, the human interrogator asks several questions to both players. Based on the answers, the interrogator attempts to determine which player is a computer and which player is a human respondent.

Player A
Computer



Player B

**Human
Responder**



Player C

Interrogator



■ Question to Respondents

■ Answers to Question

Welcome to

EEEEEE	LL	IIII	ZZZZZZ	AAAAA
EE	LL	II	ZZ	AA AA
EEEEEE	LL	II	ZZZ	AAAAAAA
EE	LL	II	ZZ	AA AA
EEEEEE	LLLLLL	IIII	ZZZZZZ	AA AA

Eliza is a mock Rogerian psychotherapist.

The original program was described by Joseph Weizenbaum in 1966.

This implementation by Norbert Landsteiner 2005.

ELIZA: Is something troubling you ?

YOU: Men are all alike.

ELIZA: What is the connection, do you suppose ?

YOU: They're always bugging us about something or other.

ELIZA: Can you think of a specific example ?

YOU: Well, my boyfriend made me come here.

ELIZA: Is it important to you that your boyfriend made you come here ?

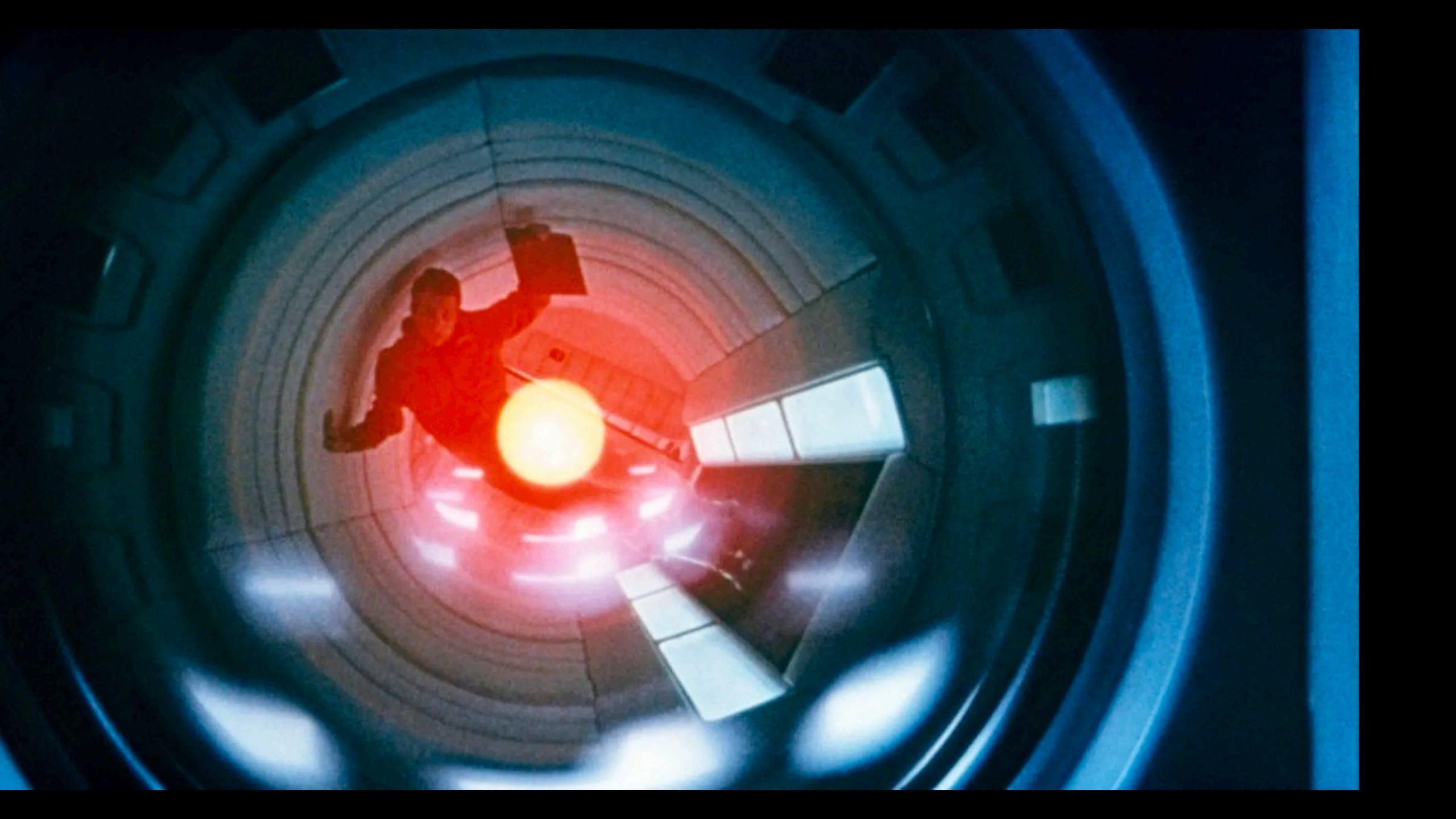
YOU: He says I'm depressed much of the time.

ELIZA: I am sorry to hear that you are depressed.

YOU: It's true. I am unhappy.

ELIZA: Can you explain what made you unhappy ?

YOU:



Google



Google Search

I'm Feeling Lucky



Andrew Torba

FAVORITES



News Feed



Messages



Events

2



Find Friends

17



Tech.li



Kuhcoon



APTEX

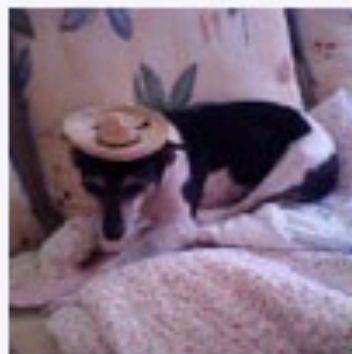


PAGES

Are They Your Friends Too?



These people now have 1 or more friends in common with you.



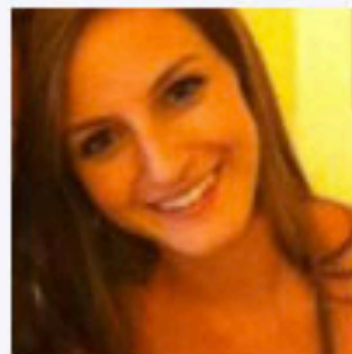
1 mutual friend

Add Friend



67 mutual friends

Add Friend



39 mutual friends

Add Friend



47 mutual friends

Add Friend

[See All Suggestions](#)



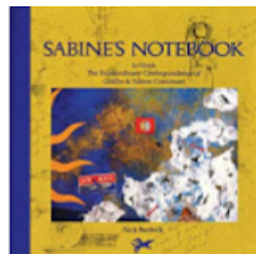
Top picks for you



Aviation Metal & Alloys Pure Titanium Wire 0.50mm x 5M For Medical Uses or High Strength...

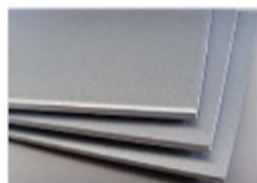
★★★★☆ 13

₹701.00



Sabine's Notebook: In Which the Extraordinary Correspondence of Griffin & Sabine Continues (Griffin and Sabine)

★★★★★ 167



Invento 1pcs Al Aluminium Alloy 2mm Plate/Sheet...

★★★★☆ 37

₹290.00

Prime FREE Delivery



IBELL Angle Grinder AG10-70, 850W, Copper Armature, Disc...

★★★★☆ 1,744

₹1,706.00

✓prime FREE Delivery



iBELL 200-89 Inverter ARC Compact Welding Machine...

★★★★☆ 1,723

₹5,393.00

✓prime FREE Delivery



GVD PVC & FR Insulated 2 Core 1mm Lenth-10Mtr, Flexible Copper Wires & Cables for...

★★★★☆ 12

₹572.00

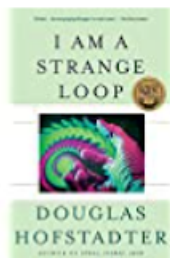


TheGiftKart Transparent Crystal Clear Back Cover for Samsung...

★★★★☆ 6,571

₹199.00

✓prime FREE One-Day



I Am a Strange Loop

★★★★☆ 389



HUPSHY Samsung Galaxy M21 2021 Armour Back Cover Case |...

★★★★☆ 1,738

₹185.00

✓prime FREE Delivery



The Idea Factory: Bell Labs and the Great Age of American Innovation

★★★★☆ 565



Stookin N20 3.7V - 6V 100 RPM Micro Gear Reduction DC Motor with 30:1 Metal Gearbox For RC...

★★★★☆ 76

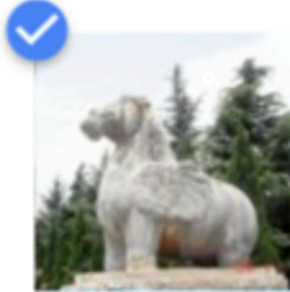
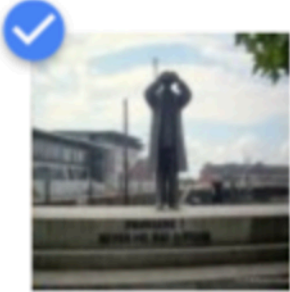
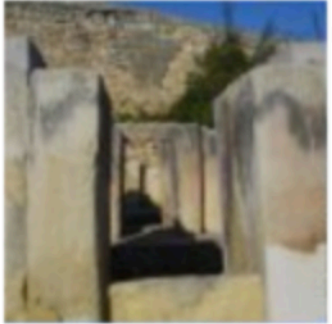
₹349.00



Metamagical Themas: Questing For The Essence Of Mind And Pattern

★★★★☆ 69

Select all images with **statues**.

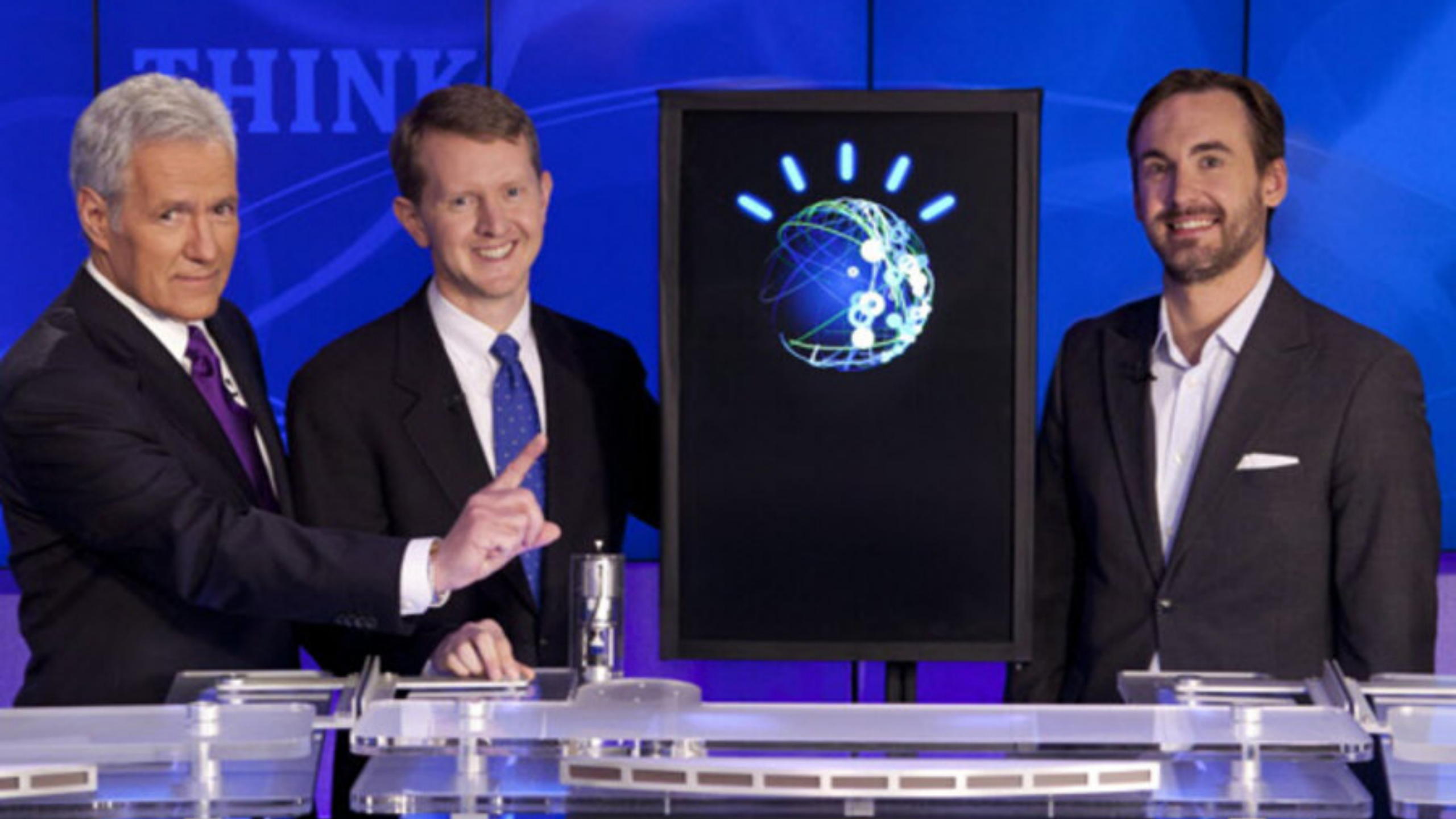


**We've been training
AI all along...**



VERIFY

















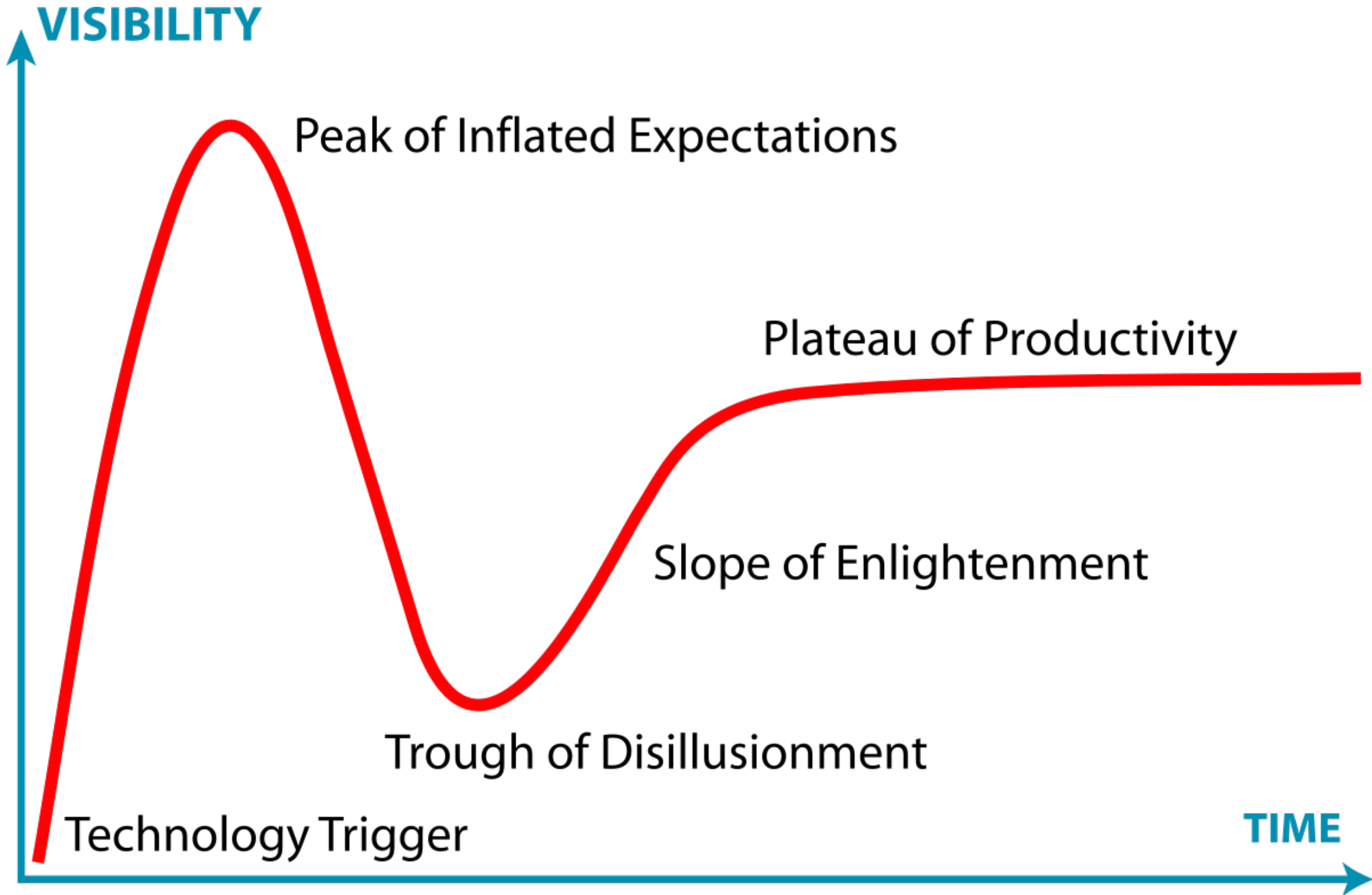
ChatGPT

<https://chat.openai.com/>

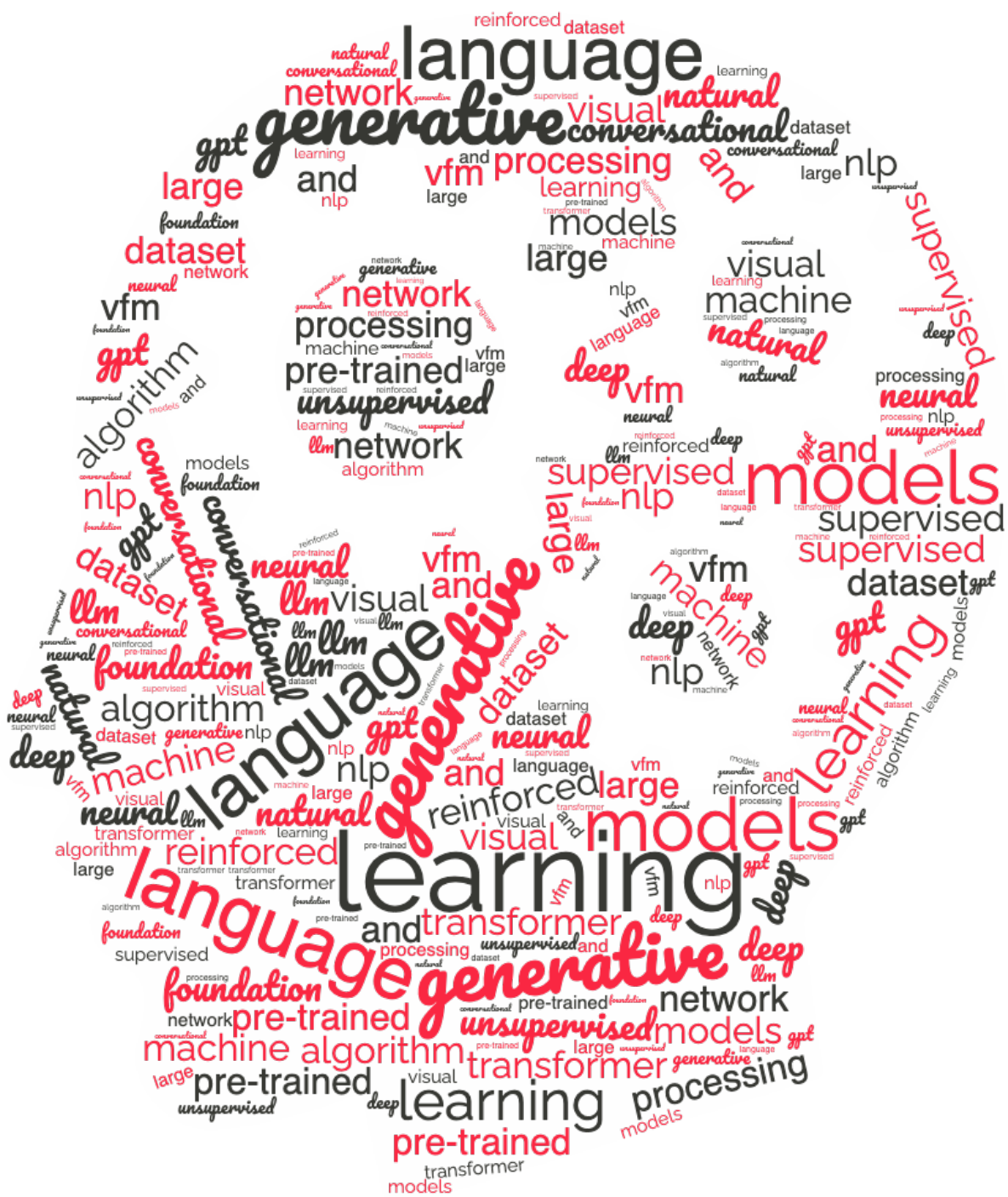
**AI is all around us.
ChatGPT made us realize it.**

Pandora's Box is Open



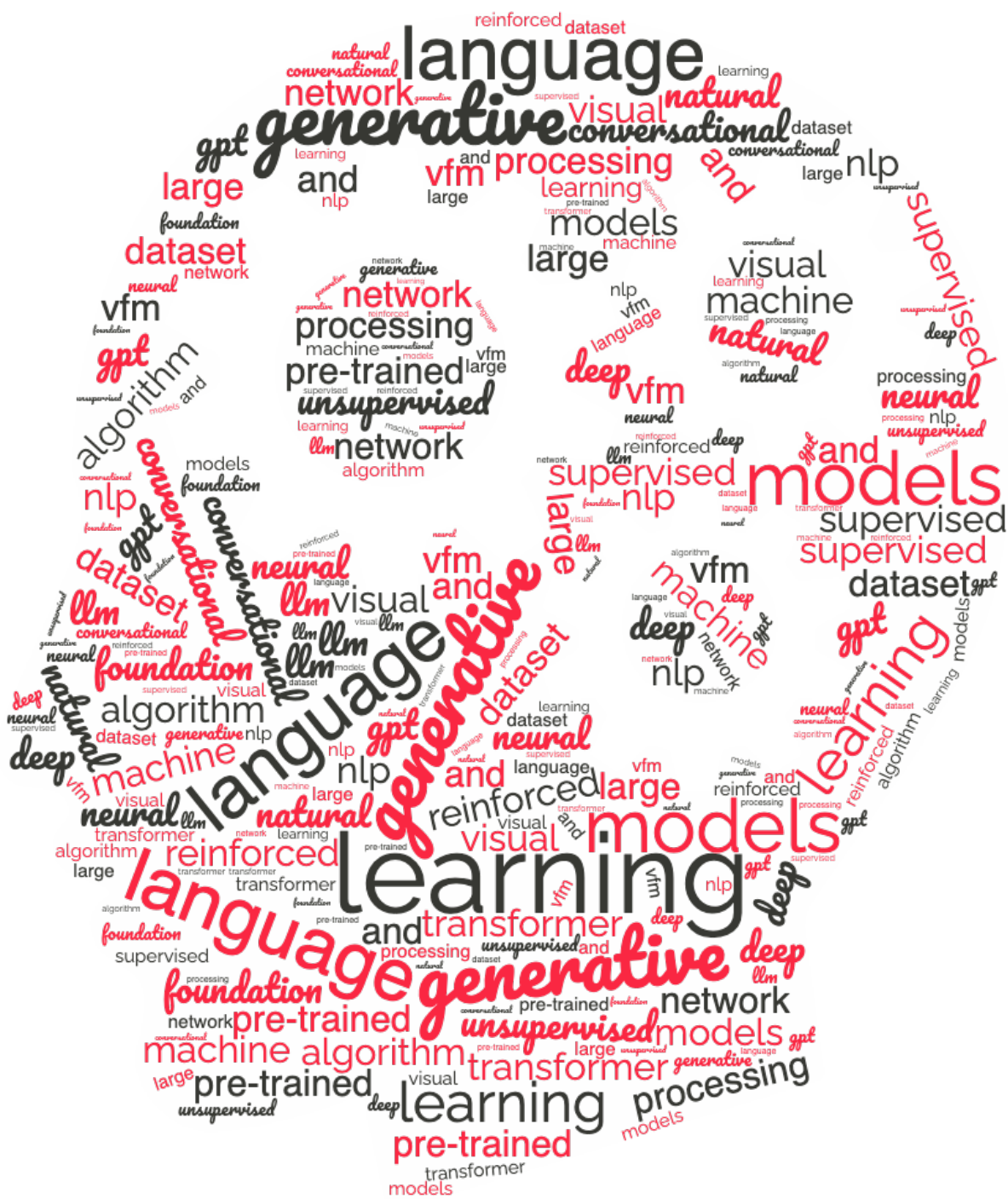


Common AI Terms



Common AI Terms

Generative AI



Common AI Terms

Generative AI

Conversational AI

Dataset



Common AI Terms

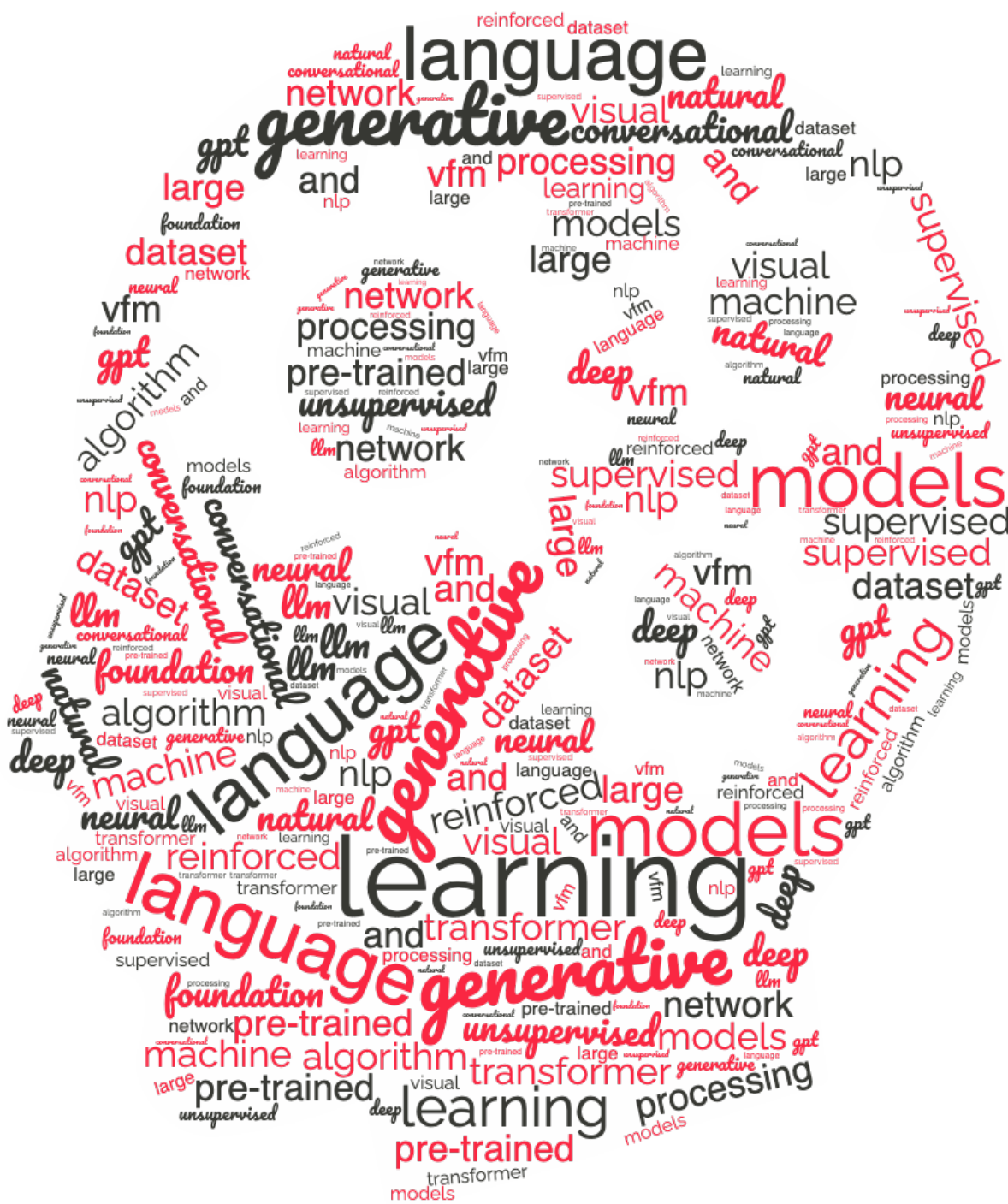
Generative AI

Conversational AI

Dataset

Algorithm

Neural network



Common AI Terms

Generative AI

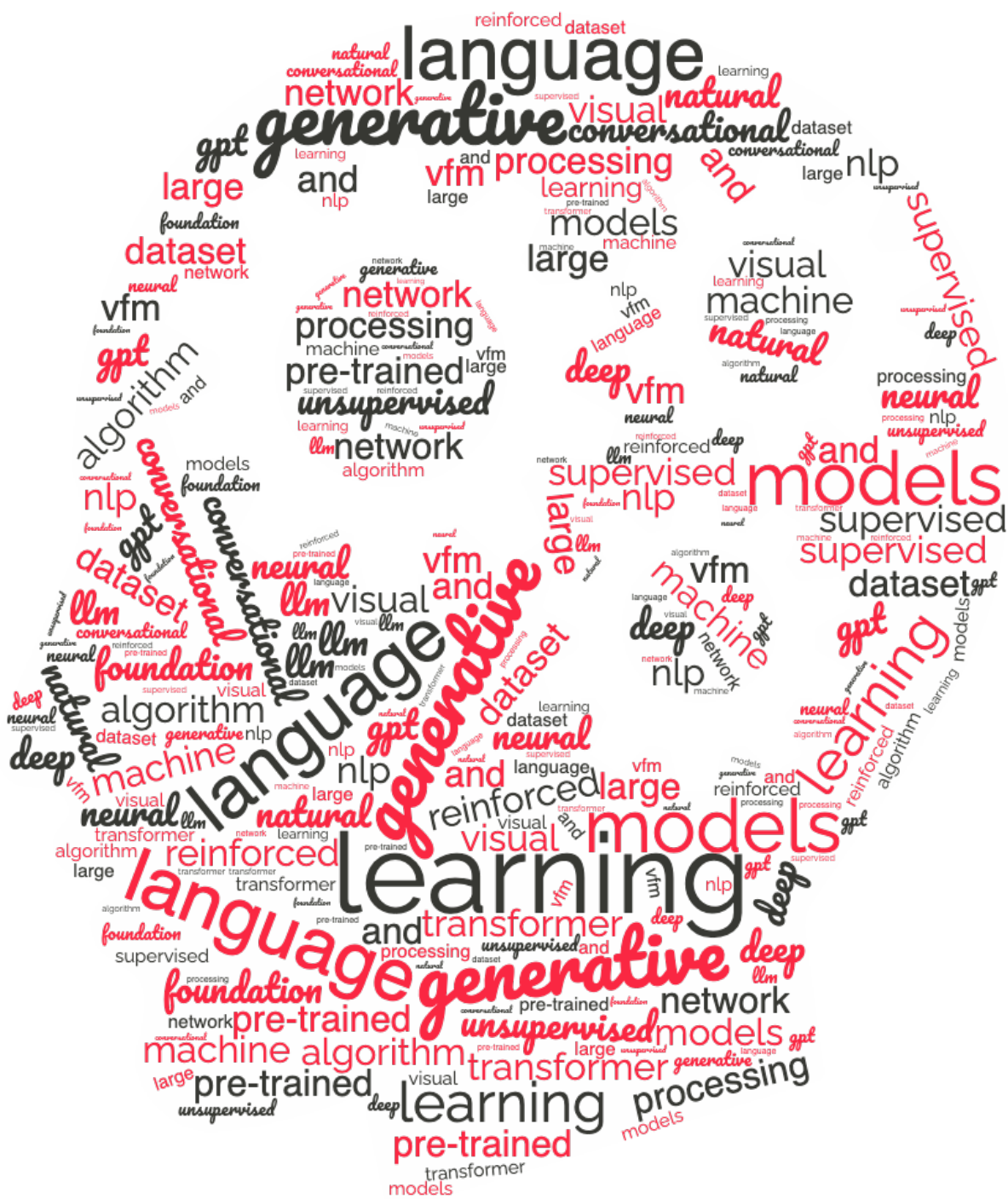
Conversational AI

Dataset

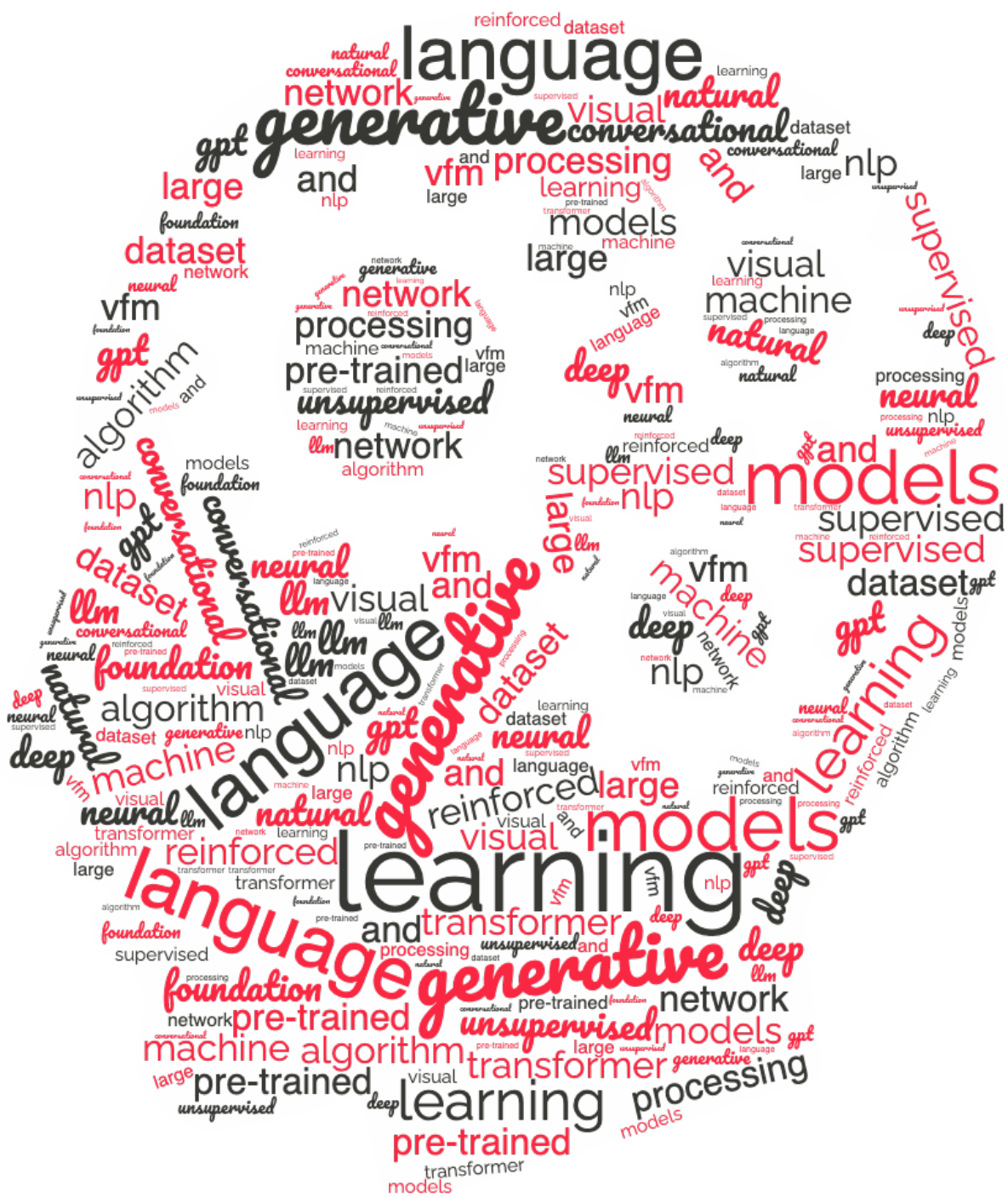
Algorithm

Neural network

Supervised,
Unsupervised and
Reinforced Learning



Common AI Terms



Common AI Terms

LLM - Large Language Models

Common AI Terms

GPT - Generative Pre-trained Transformer

NLP - Natural Language Processing

Common AI Terms

GPT - Generative Pre-trained Transformer

NLP - Natural Language Processing

Common AI Terms

GPT - Generative Pre-trained Transformer

NLP - Natural Language Processing

Deep learning

Common AI Terms

GPT - Generative Pre-trained Transformer

LLM - Large Language Models

NLP - Natural Language Processing

ML - Machine Learning

Deep learning

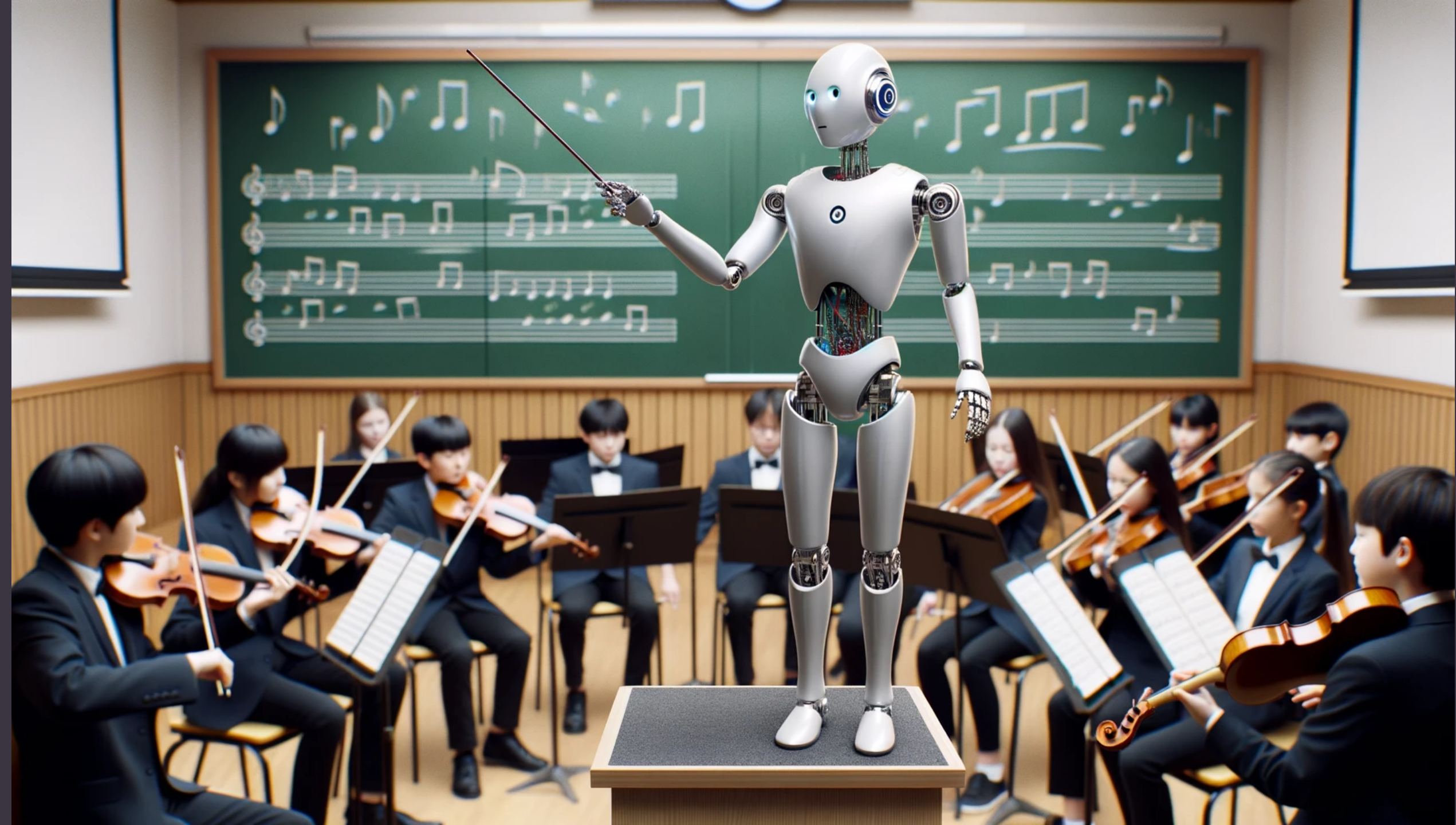
VFM - Visual Foundation Models

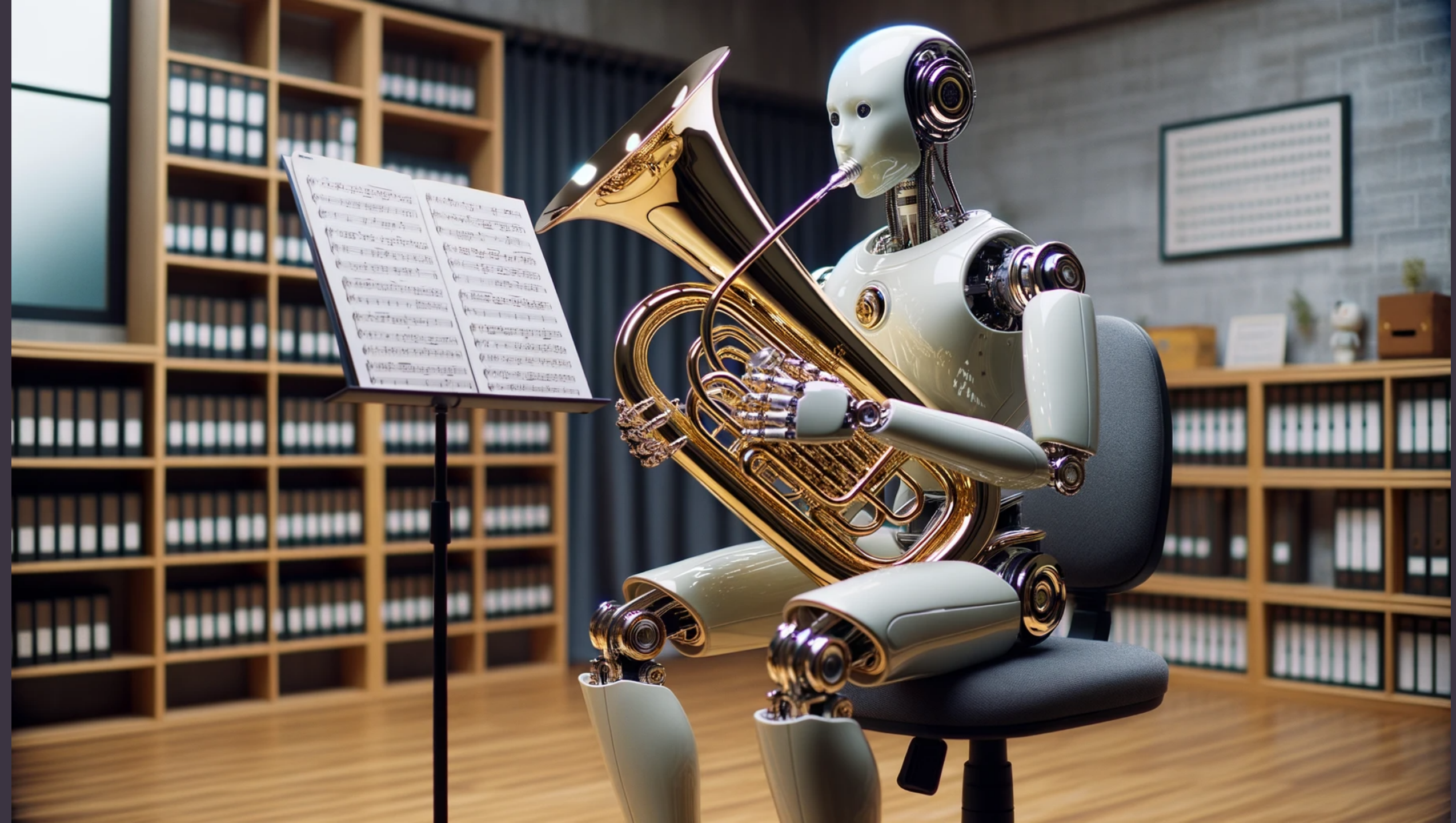
It's all about DATA

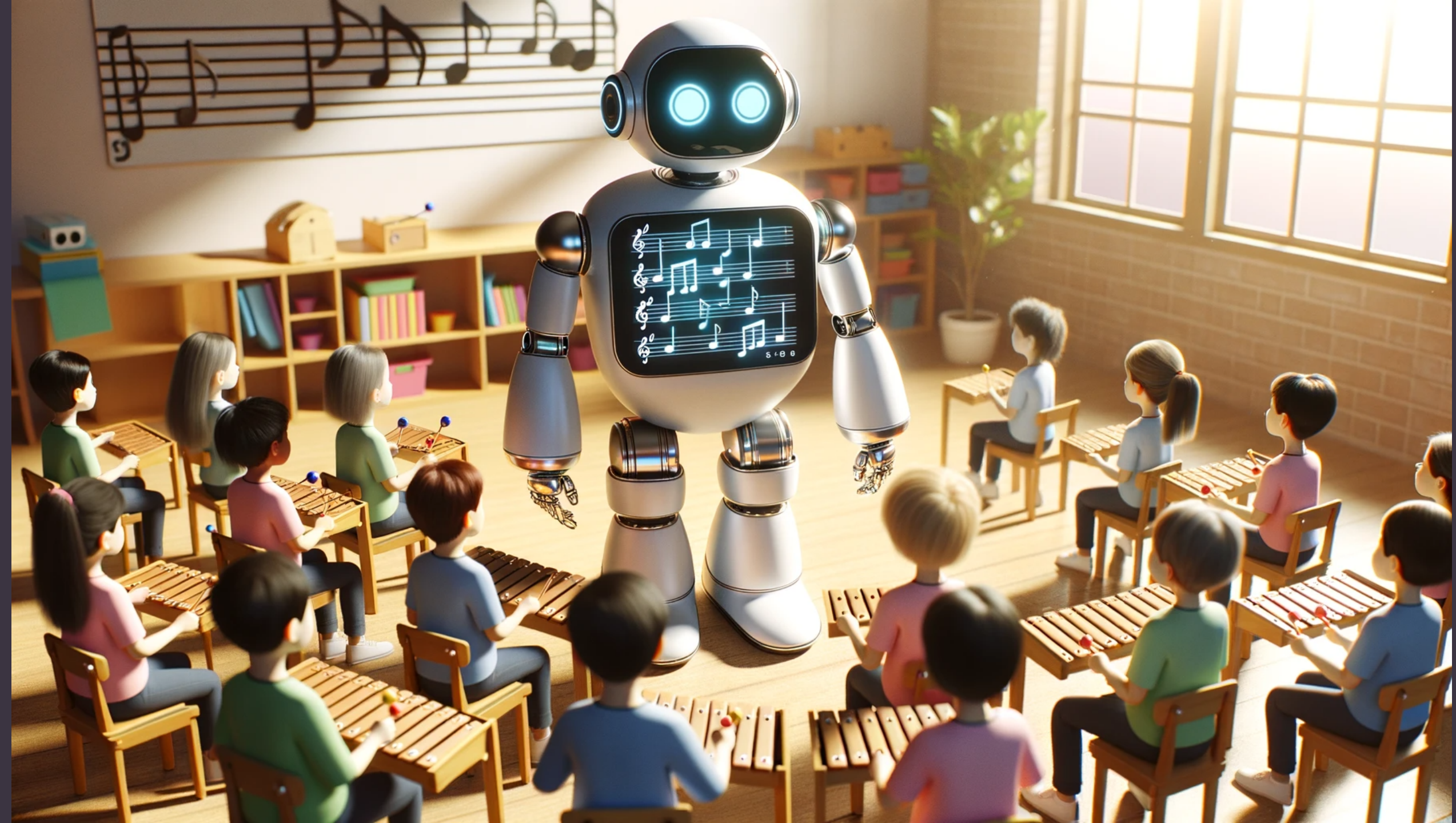
Keyword search v. Semantic search



DALL-E 3









AI in Music Software



There are hundreds of AI music apps with more launching daily. Here are a few.

American Jazz

☰

Create a Lesson Plan

1) Lesson Basics

Lesson Title

Jazz History

Select Class

-- Add to Favorites Only --

Unit

-- None Selected --

1) Teacher View Only

Objectives

Styles

B

I

≡

≡

”

ABC

Source

Students will understand the origins and development of Jazz music, including its cultural and social significance.

Materials

Styles

B

I

≡

≡

”

ABC

Source

Jazz music recordings (various styles and periods)
Computers or tablets with internet access
Whiteboard and markers
Jazz history resources (books, articles, websites)
Musical instruments (optional)

Music First Assistant

Lesson

Task

Assessment

Create a Lesson About...

create a middle school level lesson plan on jazz history

Lesson Plan Title: Jazz History

Grade Level: Middle School (6-8)

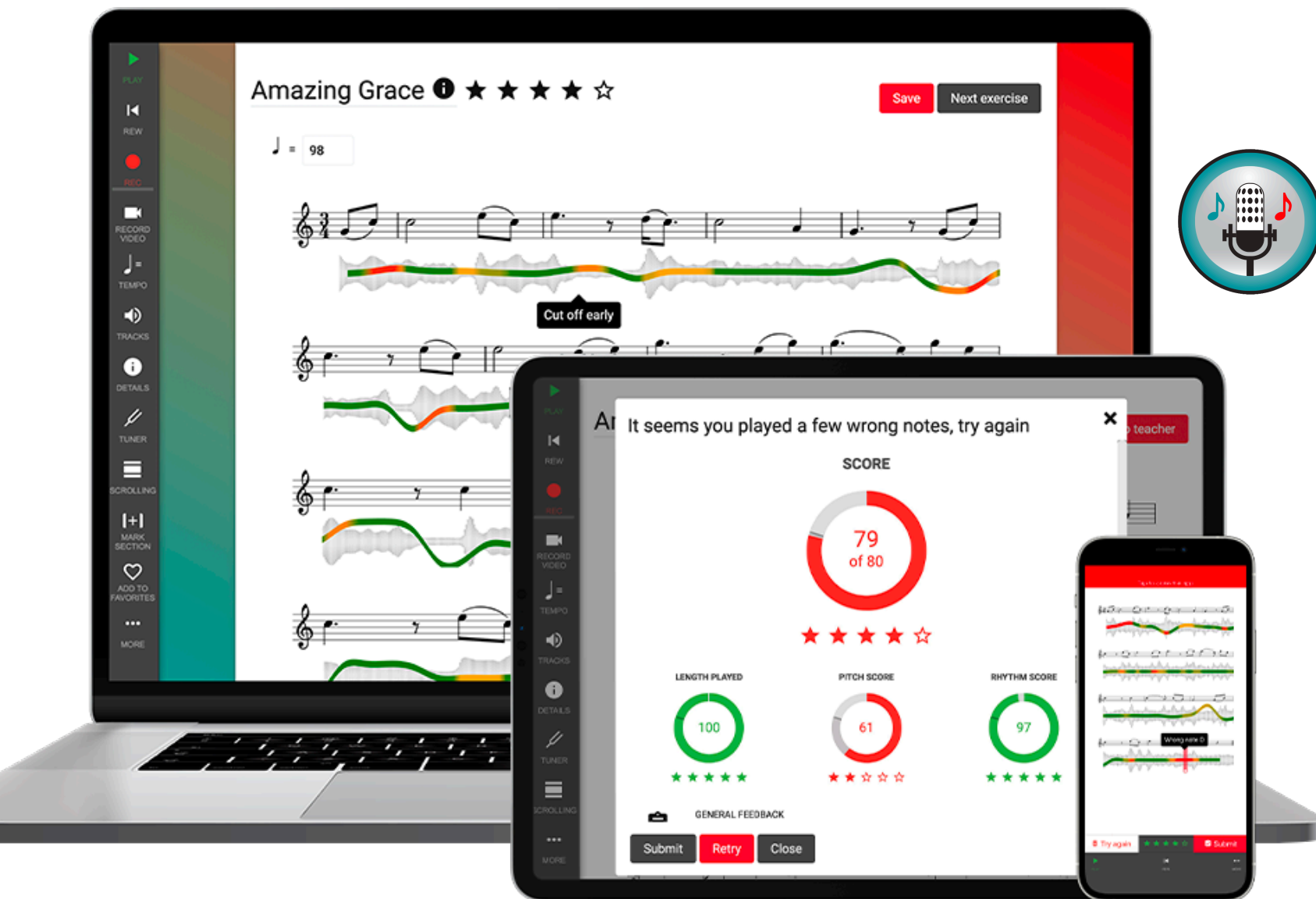
Objective:
Students will understand the origins and development of Jazz music, including its cultural and social significance.

Materials:
Jazz music recordings (various styles and periods)
Computers or tablets with internet access
Whiteboard and markers
Jazz history resources (books, articles, websites)
Musical instruments (optional)
Introduction (10 minutes):
The teacher will begin by playing a short piece of Jazz music, and ask students to listen carefully and describe what they hear. The teacher will then ask the class if they have heard Jazz music before, and if they have any idea of what Jazz music is. The teacher will introduce the topic of Jazz history, and explain that Jazz is a uniquely American music form that has been enjoyed by people all over the world.
Body (45 minutes):
Origins of Jazz
The teacher will introduce the concept of African-American musical traditions, and explain how Jazz originated from the blending of various musical traditions including African rhythms and European harmony. The teacher will provide examples of early Jazz musicians such as Buddy Bolden, Jelly Roll Morton, and Louis Armstrong.
Jazz in the 1920s
The teacher will explain how Jazz became popular during the 1920s, known as the "Jazz Age." The teacher will discuss the emergence of Jazz musicians such as Duke Ellington, Bessie Smith, and Count Basie, and how

Regenerate

Use Lesson Plan

ChatGPT
integration
into the
MusicFirst
Classroom



practicefirst
powered by MatchmySound™



Sight Reading Factory

The image displays the SRF Sight Reading Factory interface across three devices: a desktop monitor, a tablet, and a smartphone. Each device screen shows a music player interface for a piece titled "Alto Iv. 4".

Desktop Interface:

- Header: SRF logo, navigation arrow, title "Alto Iv. 4", play button, share icon, bell icon, tempo display "TEMPO 56", and settings gear icon.
- Music: A piano score in 4/4 time. The treble clef staff begins with a forte (*f*) dynamic and contains a sequence of eighth notes. The bass clef staff has whole rests.

Tablet Interface:

- Header: SRF logo, navigation arrow, title "Alto Iv. 4", play button, "Next" button, share icon, bell icon, and tempo display "TEMPO 56".
- Music: The same piano score as the desktop version.

Smartphone Interface:

- Header: SRF logo, play button, and a vertical volume slider.
- Music: A portion of the piano score is visible at the bottom of the screen.

←

File

Edit

Settings

Tutorials

↶ ↷

Save

↶ ↷

A la orilla de la...

Upgrade

Exit Studio

Show Instrument

1 9 17 25 33 41 49 57 65 73 81 89 97

707

R

Vol

🔊

🔇

🔊

🔊

BSS

R

Vol

🔊

🔇

🔊

🔊

DX7 1

R

Vol

🔊

🔇

🔊

🔊

DX7 2 (billos)

R

Vol

🔊

🔇

🔊

🔊

Minimoog

R

Vol

🔊

🔇

🔊

🔊

Freesound FX

R

Vol

🔊

🔇

🔊

🔊

191bpm_little-boops-LO...

R

Vol

🔊

🔇

🔊

🔊

Seagulls Calling

R

Vol

🔊

🔇

🔊

🔊

+

Add New Track

🎵

Browse loops

🎛️

Patterns BeatMaker

🎹

Play the synth

+

Add new track

📁

Import file

👤

Invite a friend

03:04.0

90

Off

🔊

🔊

Loops

🔍 seagulls

Any scale

148 matches from Freesound:

▶ 🎵 Seagulls Calling

Free

▶ 🎵 Early Morning Rain by Casco Bay Maine

Free

▶ 🎵 Seagulls

Free

▶ 🎵 binaural-birds-06-05-2013.flac

Free

▶ 🎵 Alcatraz Soundscape

Free

▶ 🎵 Bergen harbour

Free

▶ 🎵 boy becomes seagull 20.3.11

Free

▶ 🎵 Chernobyl Alpha Horn

Free

▶ 🎵 Fish market Venice

Free

▶ 🎵 lake waves seagulls

Free

▶ 🎵 lake waves

Free

▶ 🎵 City sounds - Aberdeen

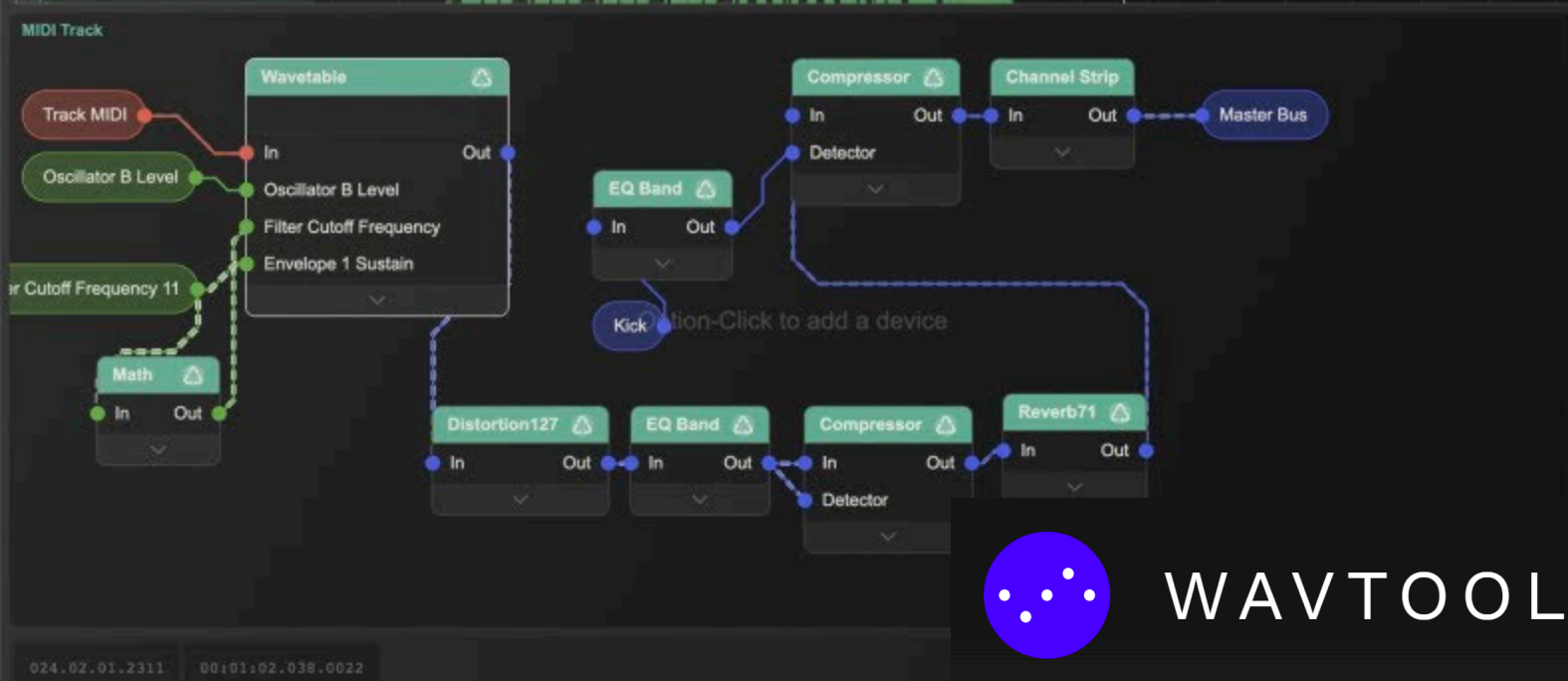
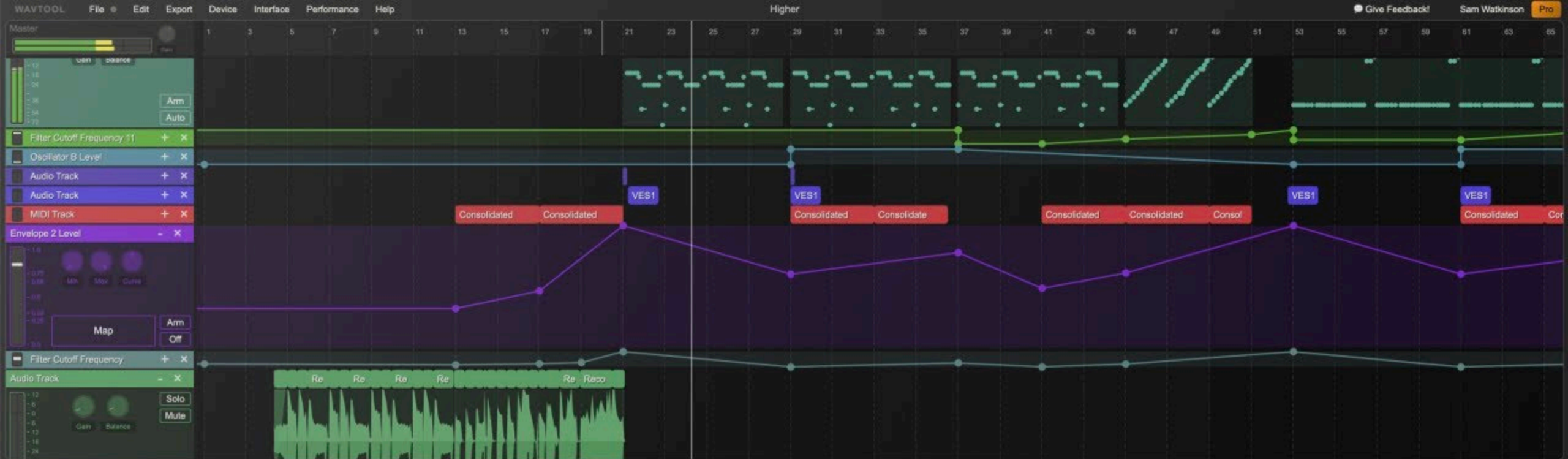
Free

▶ 🎵 Seagulls

Free

▶ 🎵 Thunder & Seagull

Free



The screenshot displays the WAVTOOL software interface, showing a 'Save Preset' dialog. The dialog contains various parameters for saving a preset, including 'Enabled', 'Diads', 'Bend', 'Low Pass', 'Saw>Sqr', 'Bend', 'Unison', 'A', 'B', 'S', 'Env1', 'Env2', 'Env3', 'Env4', 'Sync', 'Sine', 'Saw', 'Exponential', 'Beats', 'Phase', 'Level', 'Level', 'Transp', 'Attack', 'Decay', 'Sustain', 'Release', 'Level', 'Retrig', 'Voices', 'Mod', 'Porta', 'Range', 'Pitch', 'V Curve', 'Velocity', and 'Master'.



WAVTOOL



Remover



Splitter



Pitcher



Key BPM
Finder



Cutter



Joiner



Recorder



Support

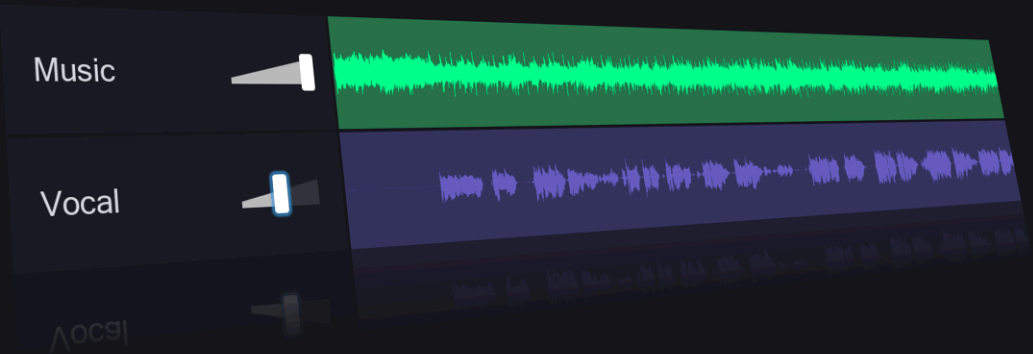


[HOW IT WORKS](#)

[DONATE](#)

Vocal Remover and Isolation

Separate voice from music out of a song free with powerful AI algorithms



[Browse my files](#)



LALAL.AI

[Products](#)[Features](#)[Made for](#)[How to](#)[Business API](#)[Blog](#)[Login](#)[Sign up](#)

More than an app: a music partner.

Your private library accessible from any device, stored securely in the cloud.

The screenshot displays the Moises web application interface. At the top, the Moises logo is on the left, and navigation links for 'Library' and 'Lyric Writer' are in the center. On the right, the user's profile 'Alex Smith Premium' is shown. Below the navigation bar, the title 'I Like You - Les Bots' is displayed, along with controls for '5 Tracks', '120' BPM, 'Gb' key, and '12/34' time signature. An 'Export' button is also present. The main workspace features a timeline at the top with markers from 0:00 to 05:20. Below the timeline, there are five tracks: 'Vocals' (blue), 'Drums' (blue), 'Bass' (blue), 'Piano' (blue), and 'Others' (green). Each track has a volume slider and a solo button. The 'Others' track is currently selected. On the right side, there is a sidebar with a search bar and a list of songs, including 'Neo Robot - Artificial Love', 'I Like You - Les Bots', 'Newme - Follow The Sun', 'Speed Up - ClickTrax', 'Mastering - MyCraft', and 'Karaoke Land - KTV Originals'. At the bottom right, there is a 'DOWNLOAD' button and a QR code.

The one-stop-shop for all your AI needs

Largest collection of state-of-the-art AI modules.

Our platform offers a wide range of AI modules designed to streamline your development process and enhance your projects.



Drums Stem



Stem
Separation



Time
Stretching



BPM
Detection



Overdrive



Reverse



String Stem



Speed



Lyrics
Transcription



Video Mixer



Backing
Vocals Stem



Beat
Detection



Audio
Encoder



Limiter



Subtitle
Alignment



Vocal
Synthesis



Subtitle
Alignment



Chord
Detection



Beats
Detection



Vocal
Synthesis



MusicLM



What do you want to create?



Try something like...

Two nylon string guitars playing in flamenco style

A fast-paced, upbeat piece with a driving drum beat. The sound is both exciting and energetic with an aggressive rhythm.

Songs that would play in a poolside party with light summer vibes



MusicLM is an experimental technology that allows you to generate your own synthetic music for inspiration. Certain queries that mention specific artists or include vocals will not be generated. If there is a problem with the generated audio, please leave us [feedback](#).

SOUNDRAW





AIVA

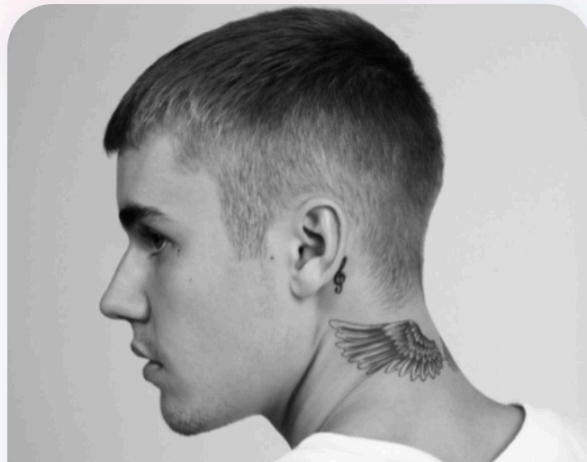
The Artificial Intelligence who composes classical music

Trending Voices

[View All](#)

AI Sfera Model

2.6K Uses · 152 Likes · CarlotaFallaci



AI Justin Bieber V2 Model

467 Uses · 13 Likes · CBR33ZiB4Bi



AI Juice wrld (Better) Model

1.5K Uses · 70 Likes · Logpoma



AI Minecraft Villager Model

4.3K Uses · 1.2K Likes · q9du0qwdiq

View All 11763+ AI Models

Check out all of the Voicify community's models!

[Get Started](#)

Edit Image

Crop

Flip



Text to image



Text to image

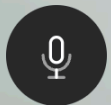


Choose the image of “A panda riding a bike through the city with depth of field” you’d like to use.



Canva













Implications for Music Education





Personalized Music Learning





Authentic Assessment





Computer - Human Interaction





Detailed Data Analysis





Music Composition





Music Listening





Questions?



jim@musicfirst.com

www.musicfirst.com

www.jamesfrankel.com

soundcloud.com/musicfirstpodcast



Thank you!

jim@musicfirst.com

www.musicfirst.com

www.jamesfrankel.com

soundcloud.com/musicfirstpodcast