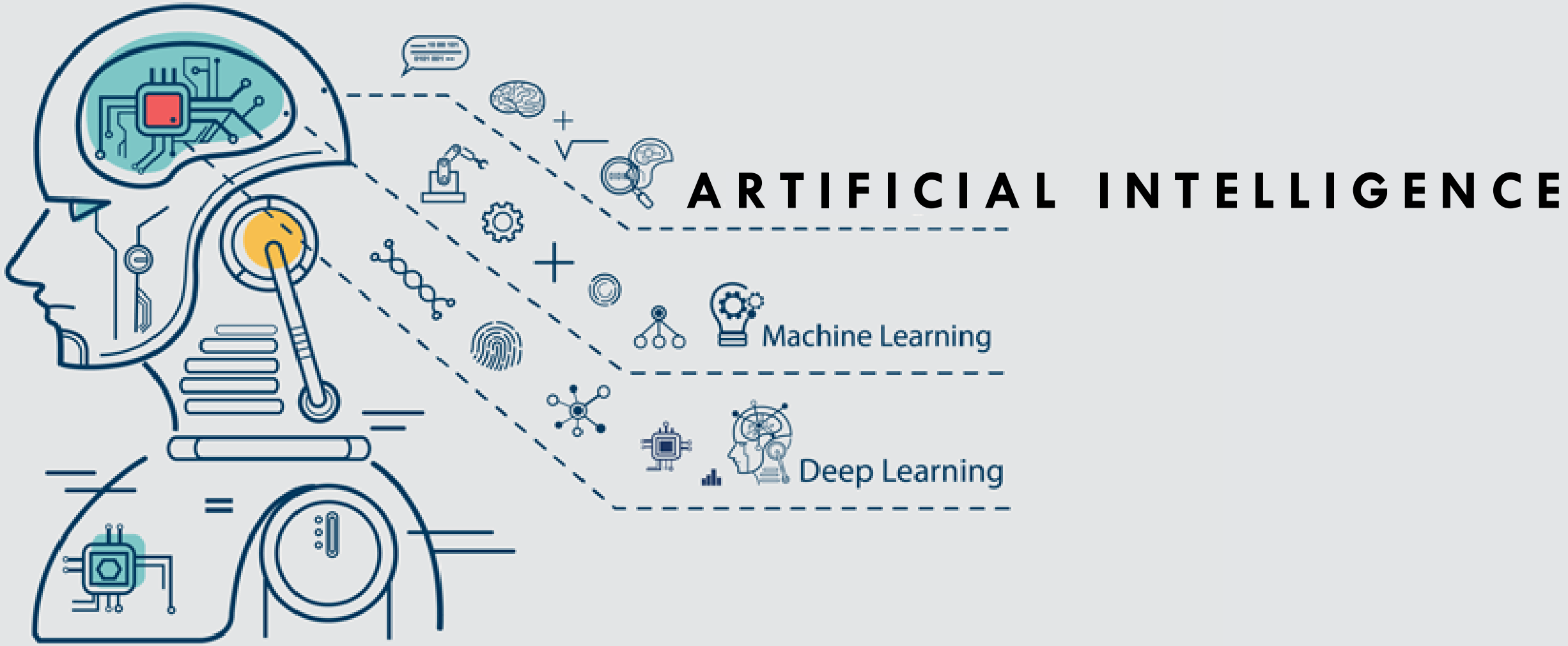


Dr. Seemab latif

Lecture 1

10th Sept 2024

Who Am I…

A tech enthusiasts committed to AI

Dr. Seemab Latif

- **HoD AI&DS**
- Tenured Associate Professor
- PhD Artificial Intelligence (Uni of Manchester)
- 70 plus publications
- 7 commercial IPs

5 Years of AI Innovation

- CPInS Lab
- Funded Research and Commercial Projects
- UG, PG, PhD Research

Team

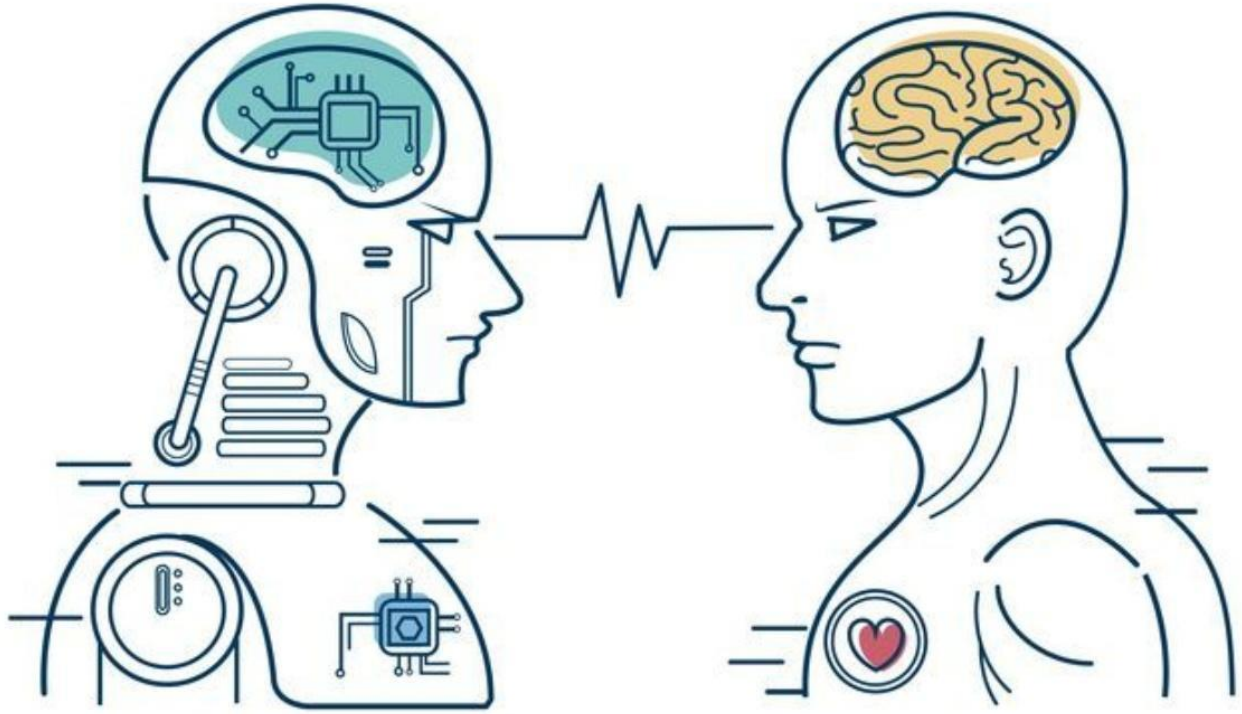
- 11-member team with AI experience

What is AI

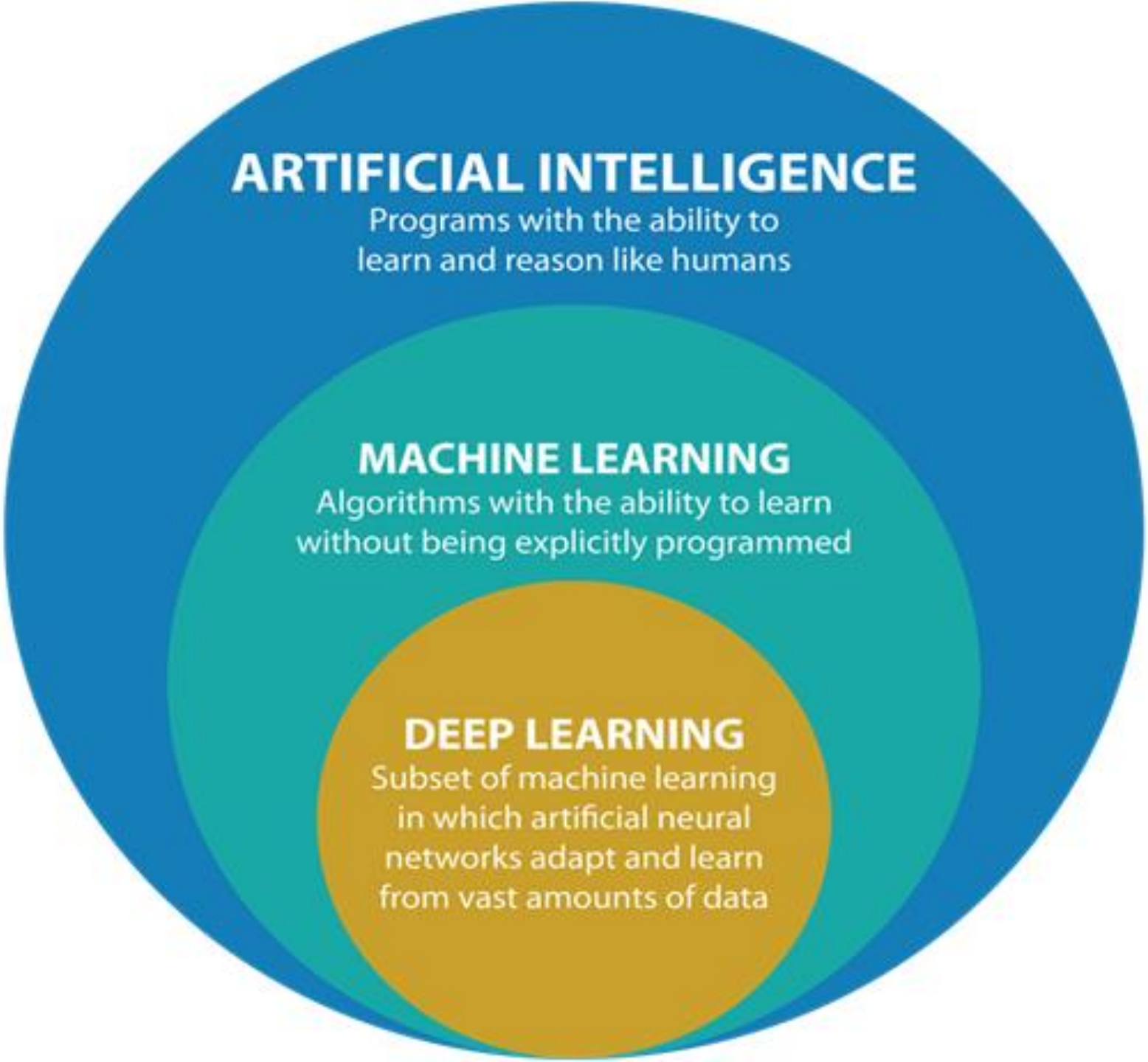
- Artificial intelligence is the ability of machines to perform tasks that are typically associated with human intelligence, such as learning and problem-solving.
- Such machines have the ability to learn about the world that surrounds them and take actions that will have the best chances of achieving success.
- Research into AI involves using a lot of tools from other sciences such as psychology, linguistics, computer science, and many others.

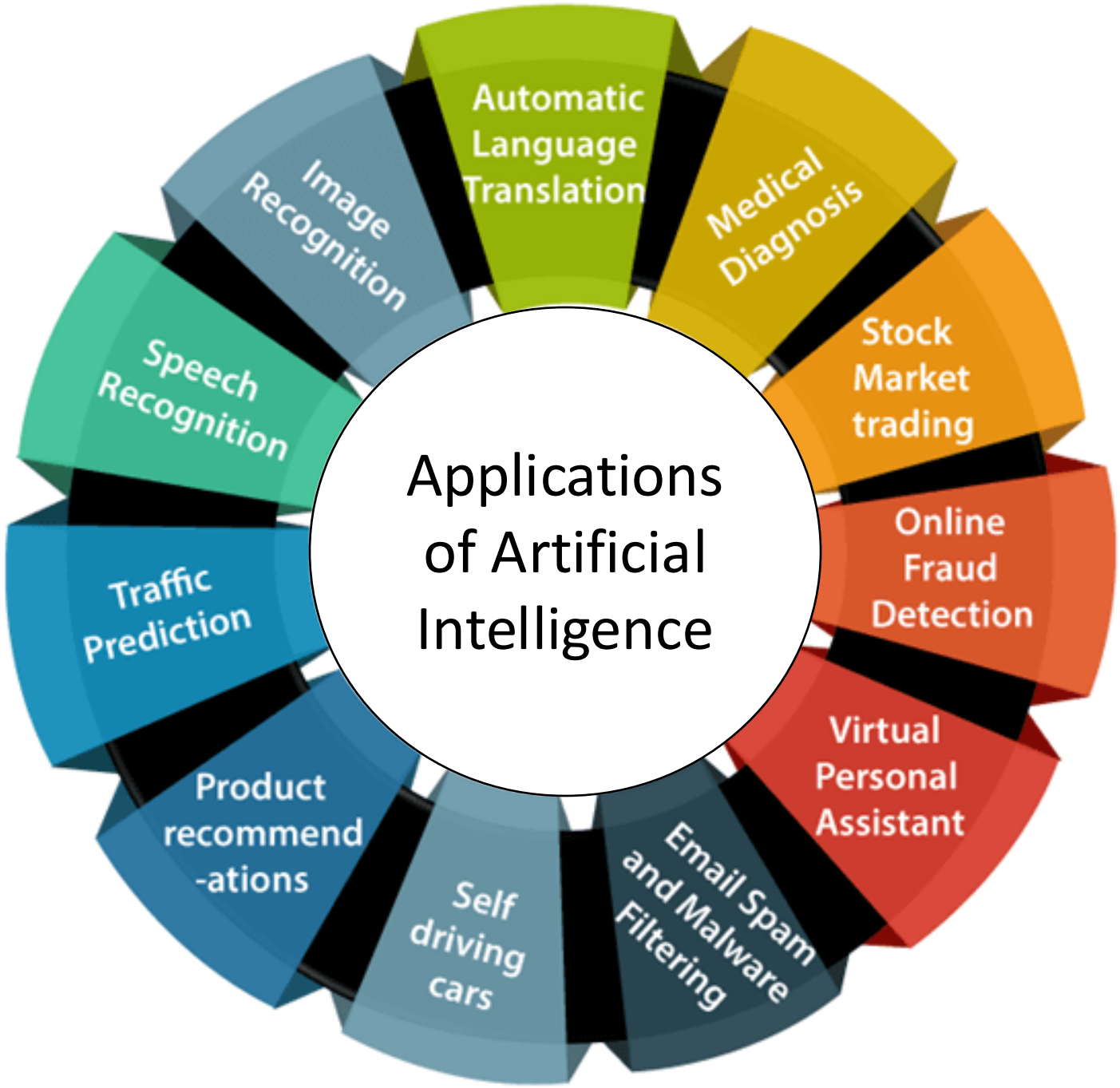
AI vs. HI

- Human intelligence and artificial intelligence go hand-in-hand.
- AI can handle repetitive, data-driven tasks and give data-based results.
- Human intelligence can work on creative, emotional and critically complex tasks

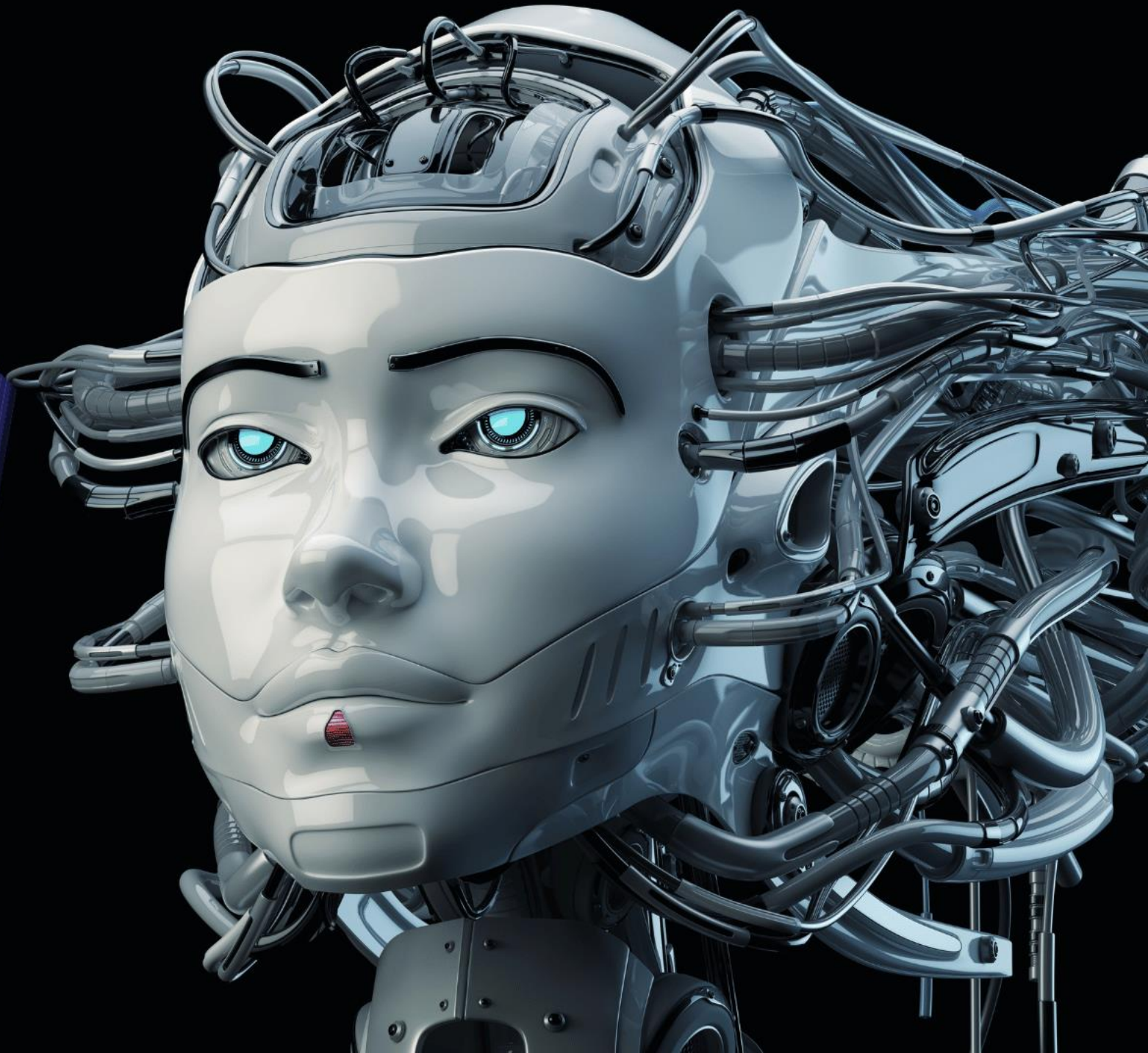


Areas of AI


ARTIFICIAL INTELLIGENCE
Programs with the ability to learn and reason like humans
MACHINE LEARNING
Algorithms with the ability to learn without being explicitly programmed
DEEP LEARNING
Subset of machine learning in which artificial neural networks adapt and learn from vast amounts of data


Applications of Artificial Intelligence
Automatic Language Translation
Medical Diagnosis
Stock Market trading
Online Fraud Detection
Virtual Personal Assistant
Email Spam and Malware Filtering
Self driving cars
Product recommend-ations
Traffic Prediction
Speech Recognition
Image Recognition

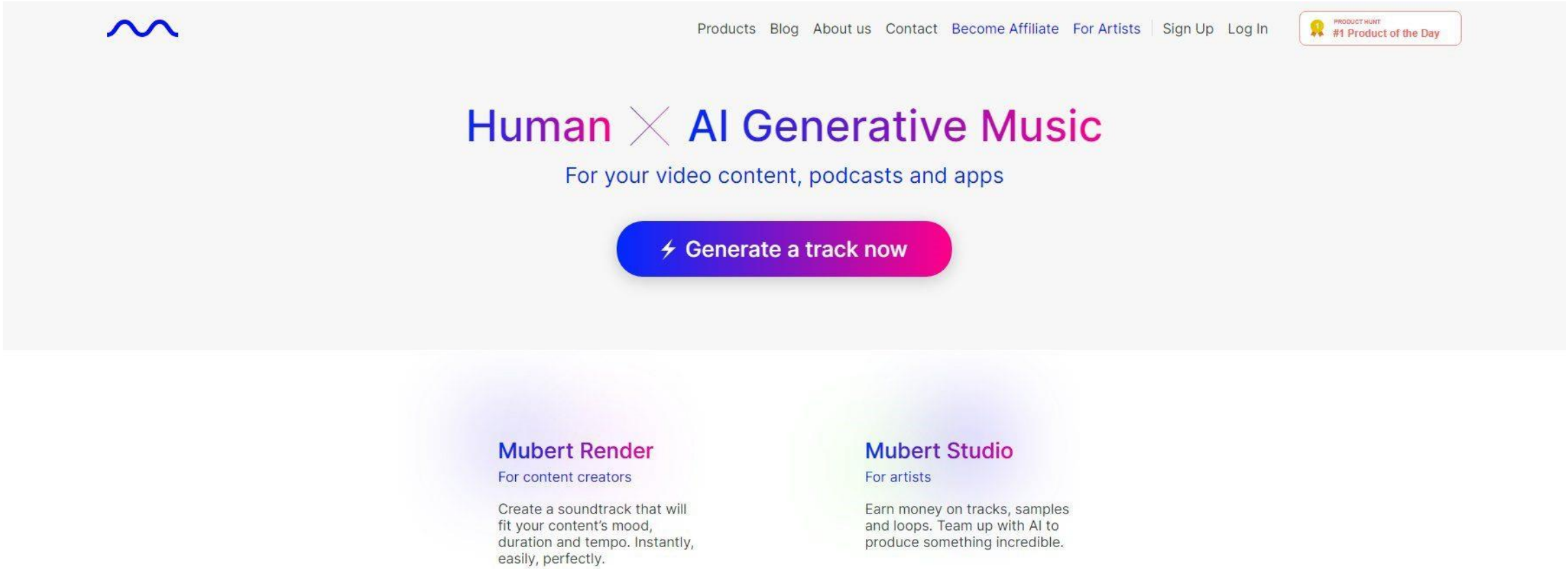
WHAT AI CAN DO



KLING

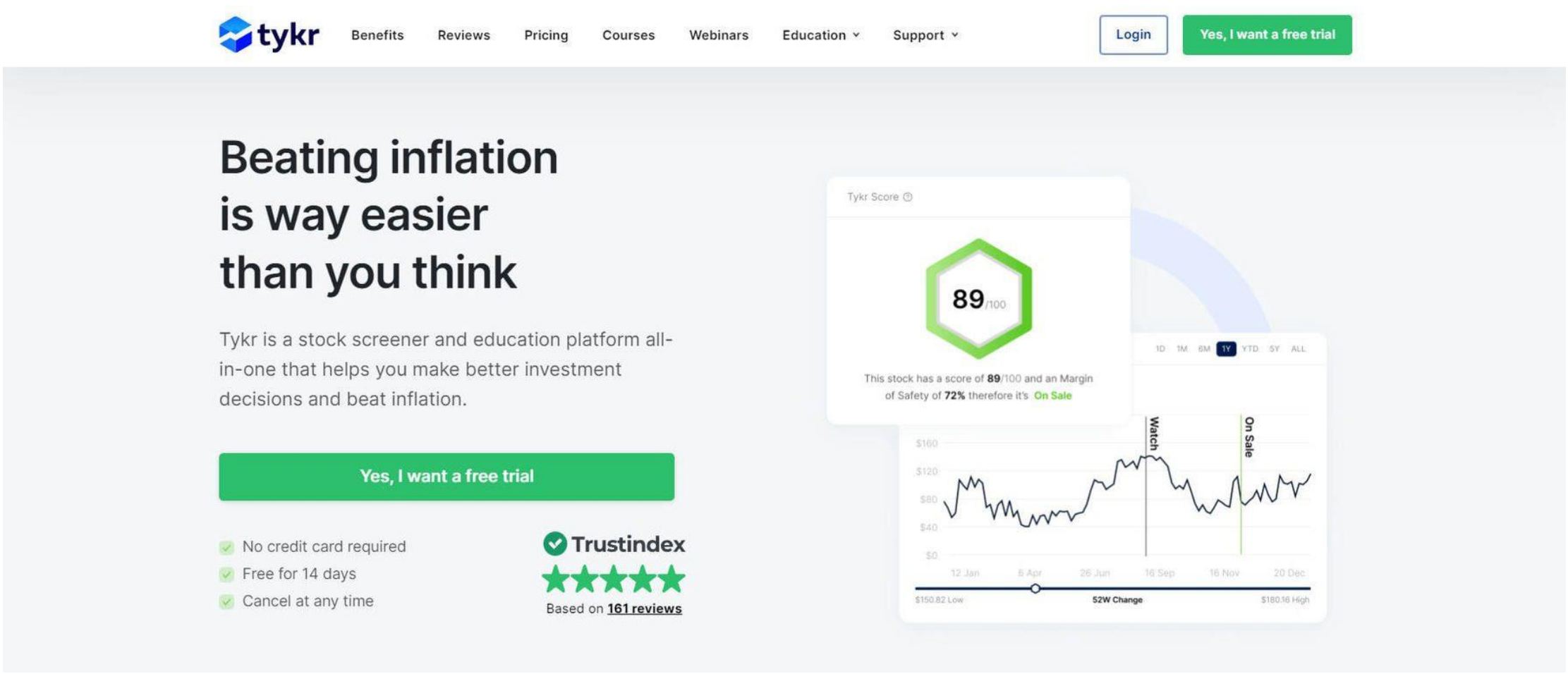
Source: https://kling.kuaishou.com

Create Audio



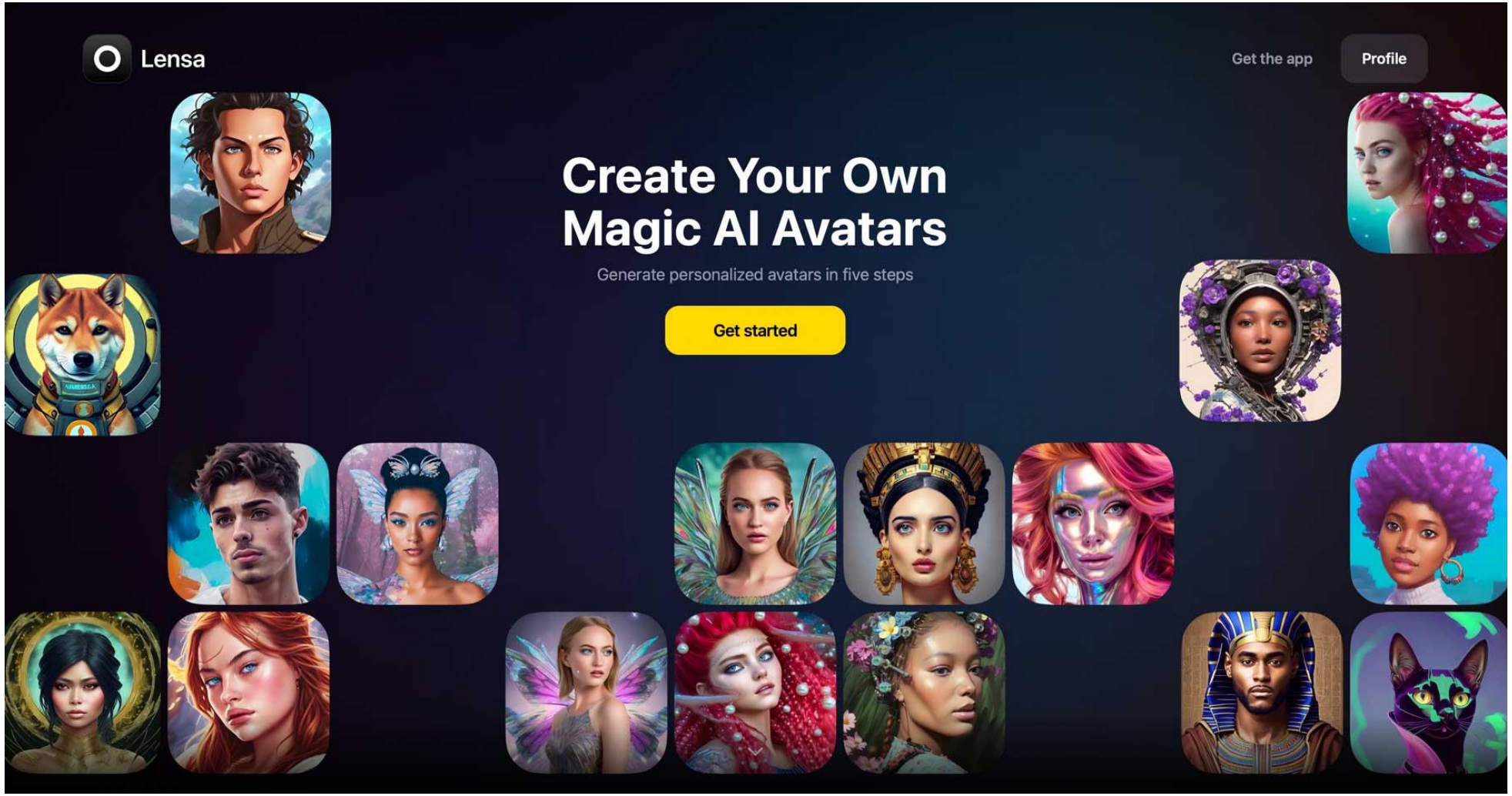
- **AI music generators**, **audio tools**, and **voice generators**, you can add a soundtrack to a podcast, add a voice overlay to marketing videos, and even create your own music to enhance projects.
- For example, using **Mubert**, you can easily generate music with a text prompt and a few clicks. We used the prompt "*First lecture of the semester, hurray"* and created this clip in less than a minute.

Keep Track of Your Business



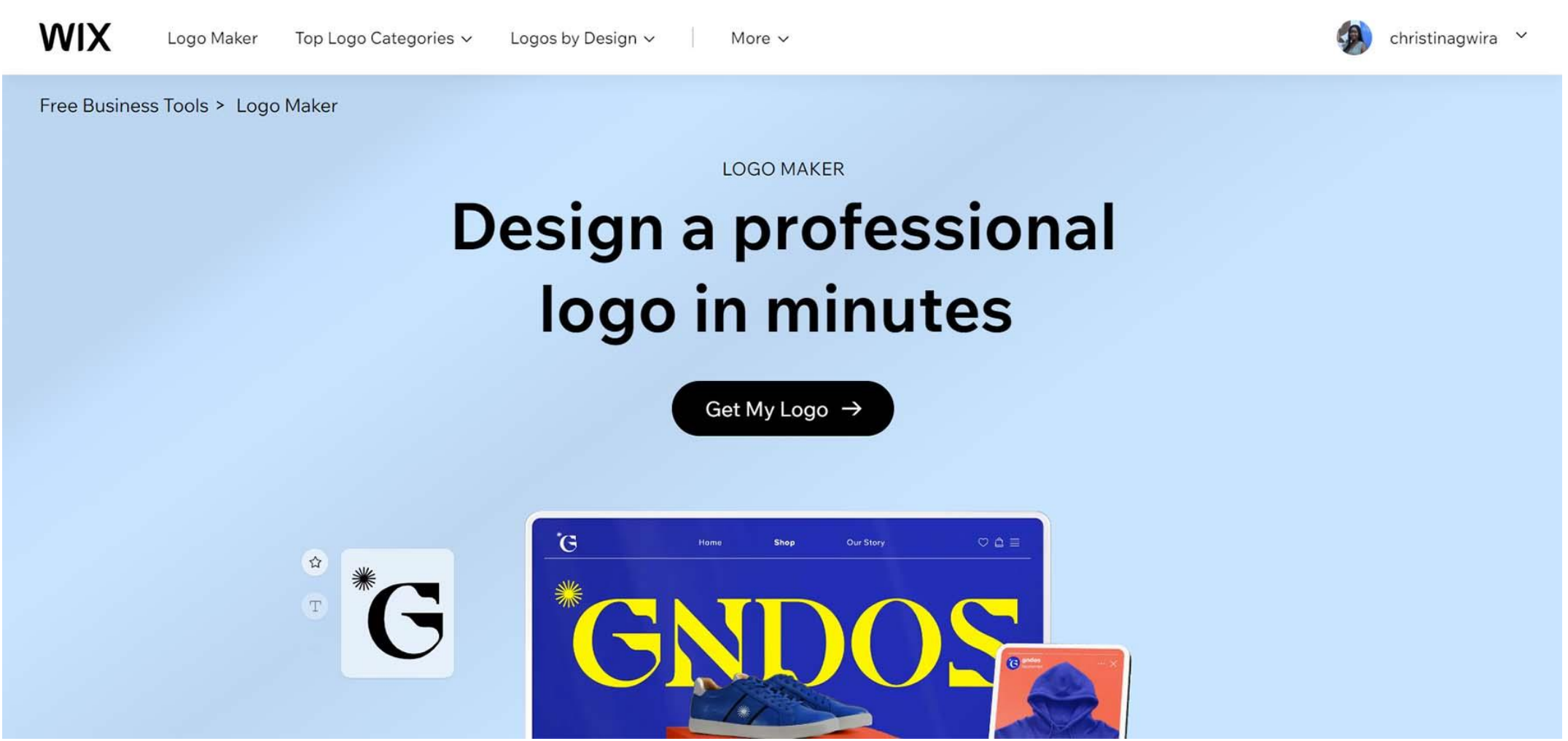
Running a business is time-consuming, especially if it's a one-person operation. Thanks to advancements in artificial intelligence, hiring a human to assist you is no longer required. Whether you need help writing a blog post, managing appointments, or financial tips, **AI assistants** can help with several tasks to help you be more productive. For example, using a financial assistant, such as **Tykr**, you can manage your stock portfolio, get insights on investment opportunities, and learn the basics of investing.

Create Avatars



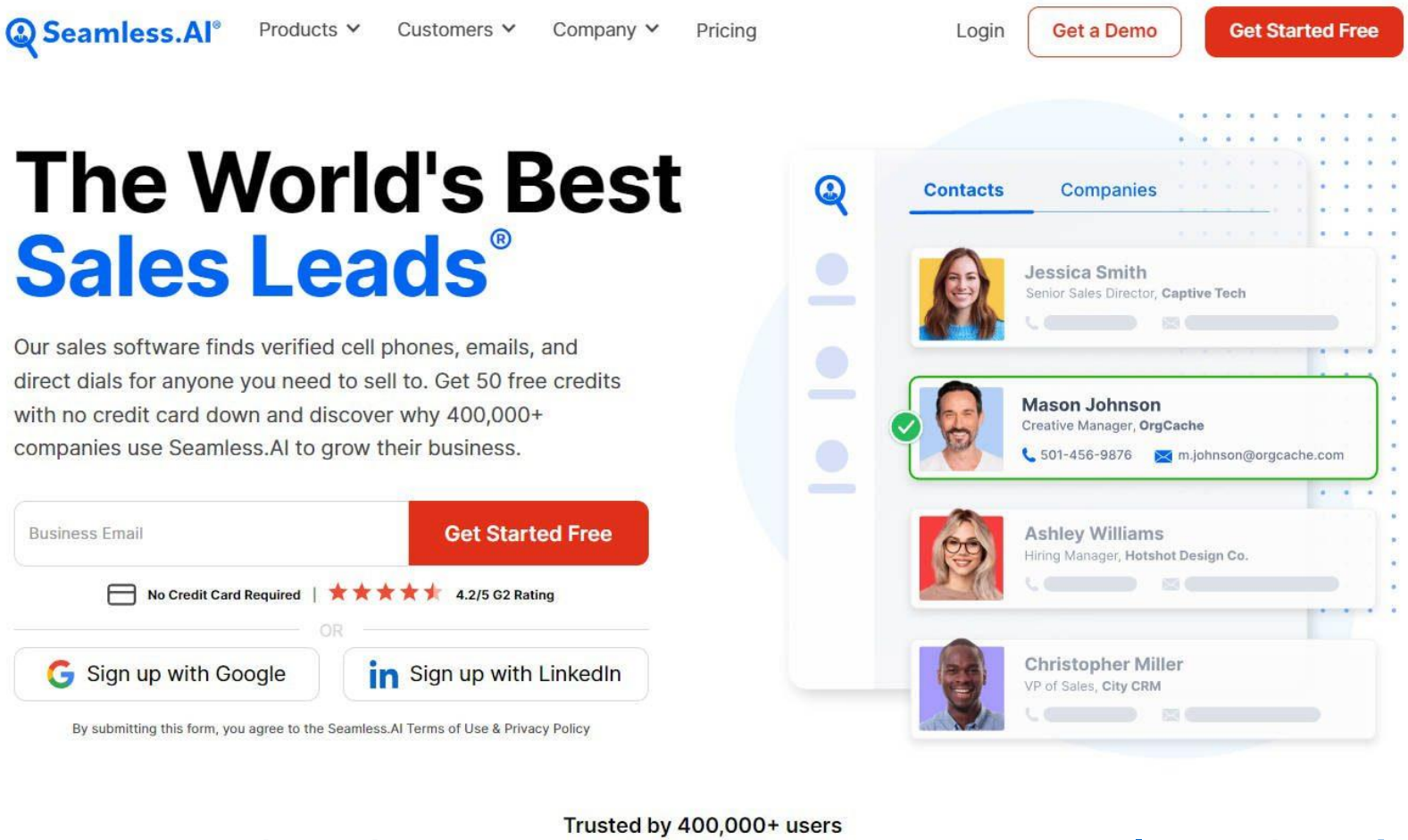
AI avatar generators are all the rage right now. Thanks to companies like Picsart, Lensa AI, and Synthesia, you can create static and video avatars. Whether you're looking to establish a more professional representation for your company, revamp your social media avatars, or even fashion lifelike 3D avatars for marketing videos or online business chat, these tools have you covered.

Help with Branding



If you're looking to rebrand your current business or start a new venture, artificial intelligence can help. There are some great **logo generators** to spark creativity and fantastic features available through companies like **Wix Logo Generator** that will make you feel like a graphic design professional in no time. Whether you want to create social media posts or build out your brand standards, branding has never been easier.

Sales and Marketing Tools

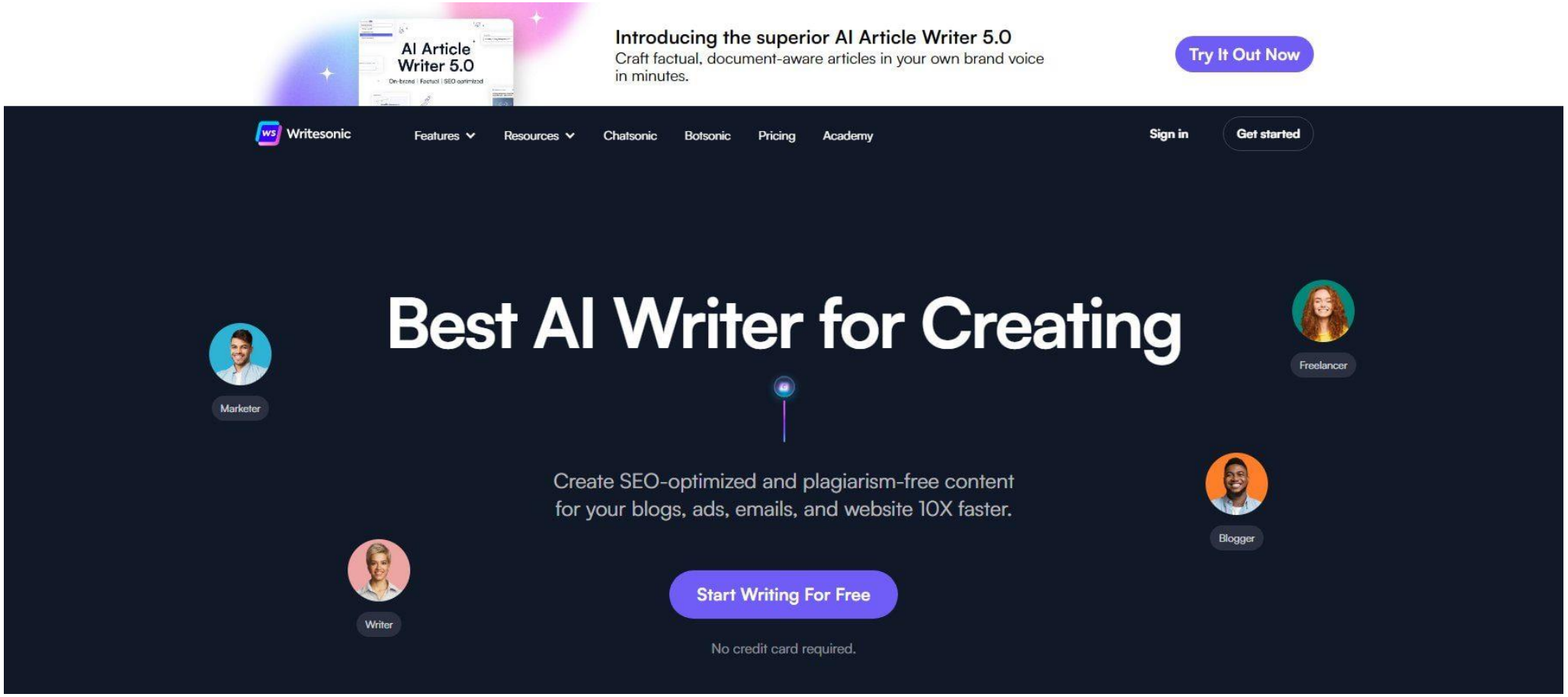


If you want to create leads and grow revenue, some excellent **AI sales** and **marketing tools** help you take your business to the next level. These tools can help you build an email list, reach out to them with video assets, and explore opportunities to analyse your client interactions. For example, using **Seamless.AI**'s built-in search engine, you can leverage the power of AI to update your contact lists with the most up-to-date contact information. Additionally, using software such as **Ocoya**, you can create social media posts and schedule them, giving you more time to focus on other aspects of your business.

Assist in Image Editing

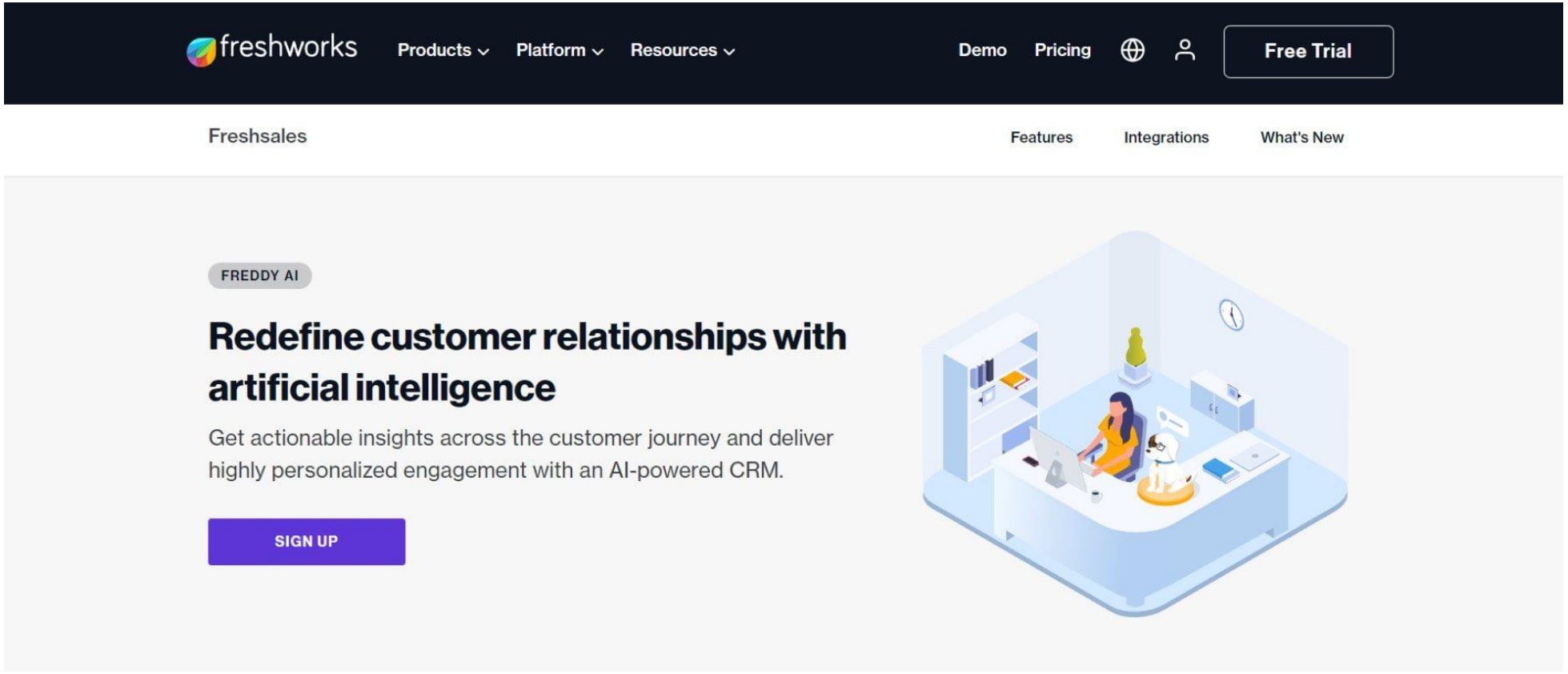
If you're a freelancer or web agency owner, you know how challenging it can be to get good client photos. Thankfully, artificial intelligence can turn you into a photo editing wizard while saving a ton of time. Whether you're looking to **upscale images**, **enhance** them, or create new compositions with **Photoshop**, image editing tools help you finish the job quickly.

Have In-Depth Conversations



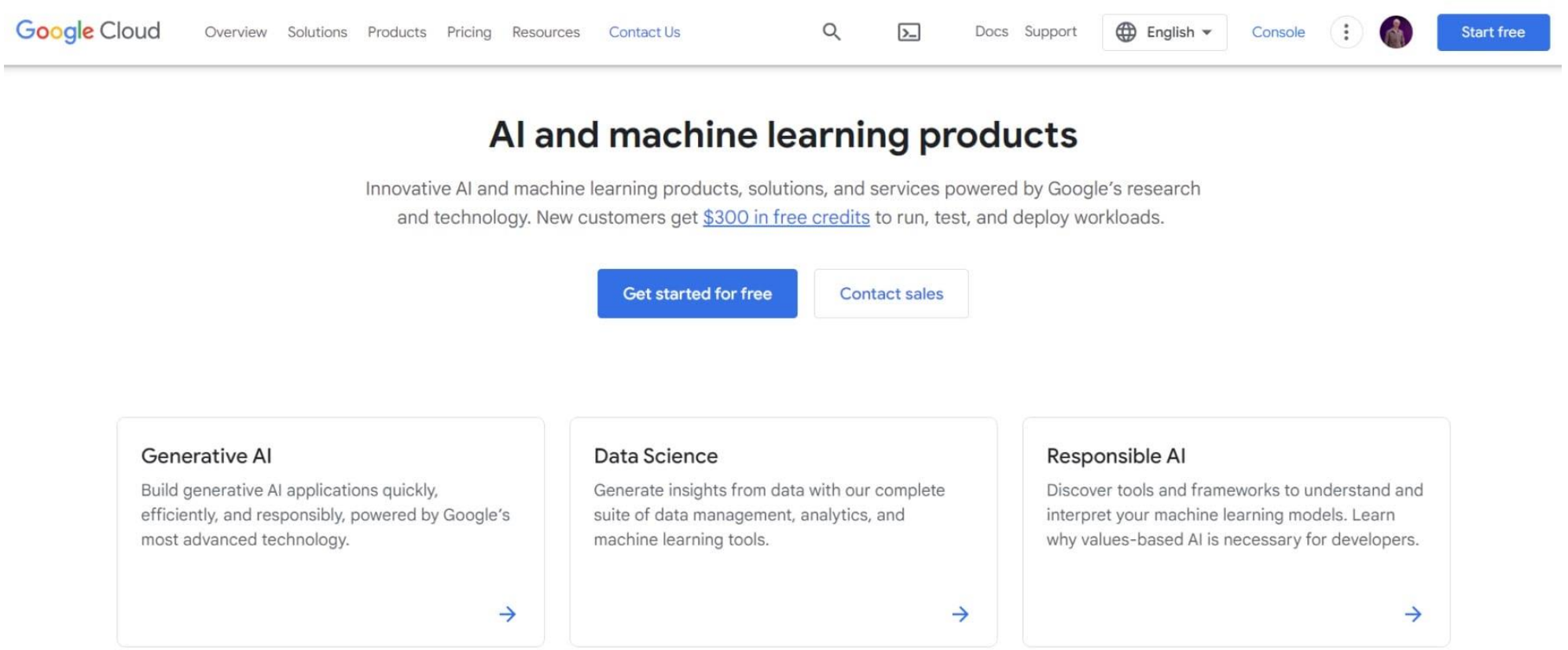
One of the most creative ways to use artificial intelligence is through **chatbots** like **Writesonic**. Built on OpenAI's GPT-4, you can converse with it to get answers to questions, help you develop blog post ideas, and more. One of the coolest things about Writesonic is their **Botsonic** tool, which allows you to create your own chatbot in a few minutes. This is a great tool to create personalized chat experiences for your site's visitors providing answers directly related to your products and services. Alternatively, you can incorporate **Character.AI** to gain a unique perspective by chatting with historical figures, celebrities or any personality you choose.

Increase Productivity



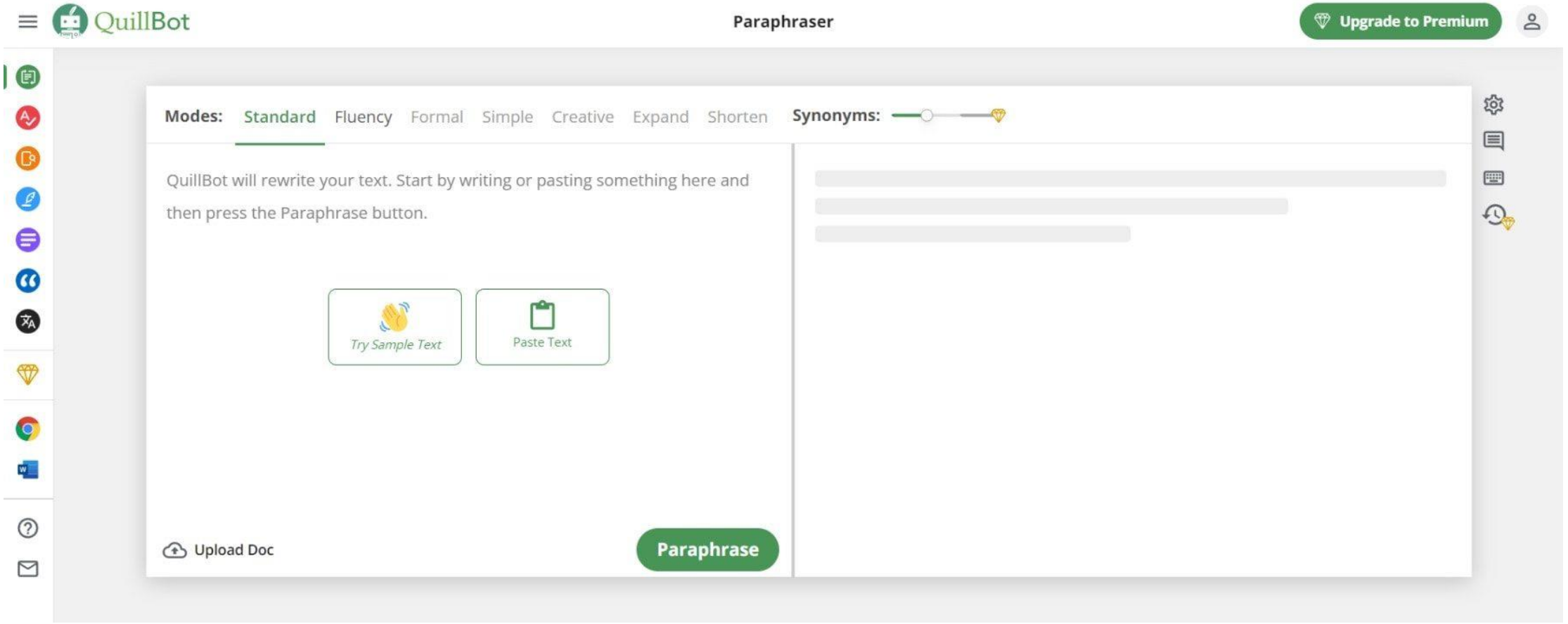
No matter what you need AI for, whether it's to get insights on how your website is performing or advanced SEO techniques, there are many **AI productivity tools** to help you get the job done fast. Need a good CRM? No problem. **Freshworks Freddy AI** can help with marketing automation, all while building a better system to interact with your customers. Alternatively, if you need a way to transcribe meeting notes, check out **Otter AI**.

Develop AI Software



One of the most powerful uses of artificial intelligence is the ability to create your own. With **AI development tools**, you can propel your business into the future by incorporating systems to assist with time-consuming tasks, freeing you up to perform more important feats. For example, if you're planning on starting your own international ecommerce marketplace, you could incorporate **Google's Translation AI**to provide content based on a user's location, then translating your text into the appropriate language.

Write Copy



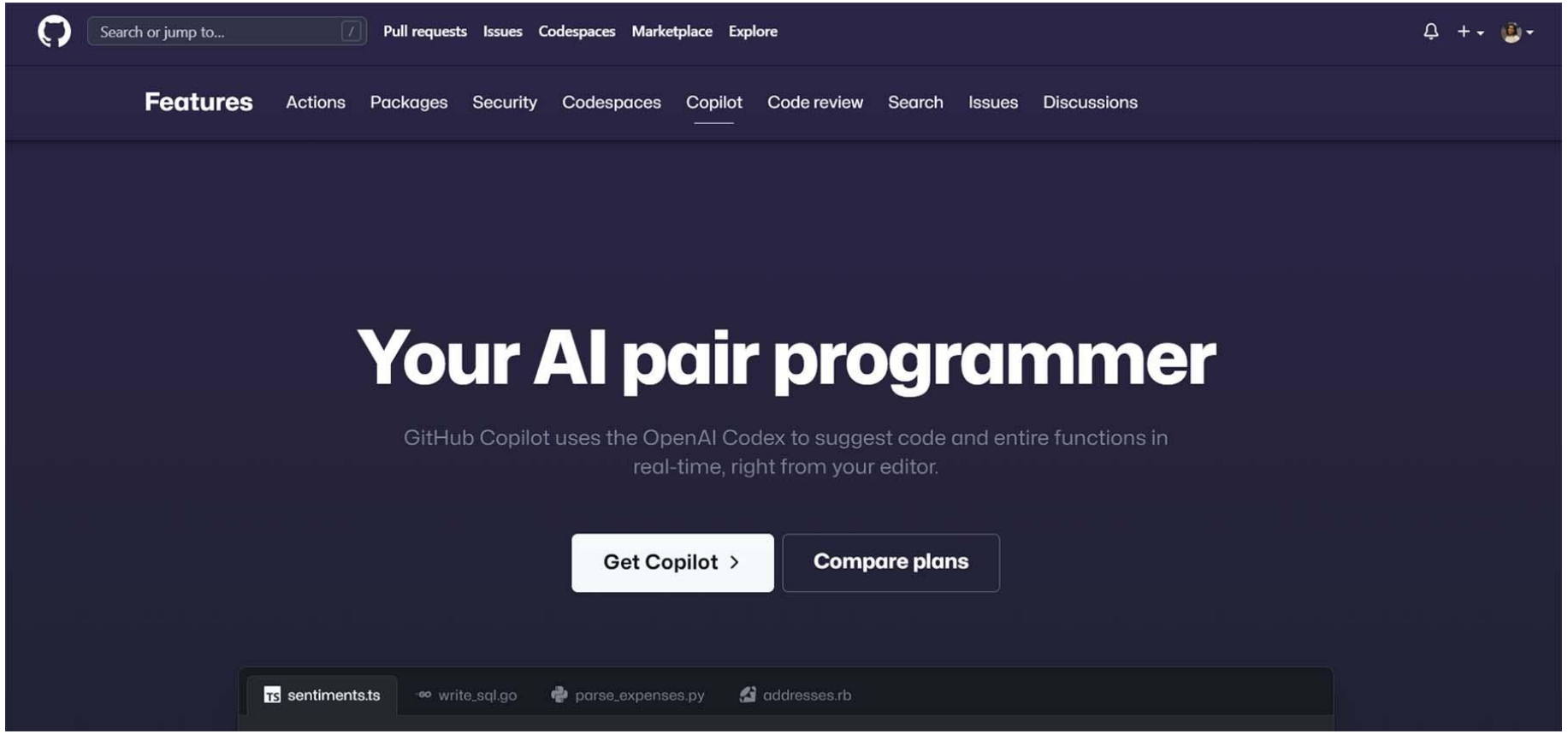
One of the most notable uses for artificial intelligence is for writing copy. Using **AI writing software** such as **Copy.AI**, **Writesonic**, or **ChatGPT**, you can create new copy for social media posts, informational text, blogs, and more.

Alternatively, if you need a little help making your copy more focused and concise, you can use a **rewriter tool**, such as **Quillbot**, to help you clarify your original content to flow better, all while retaining the authentic tone it was written in.

Make Creative Assets

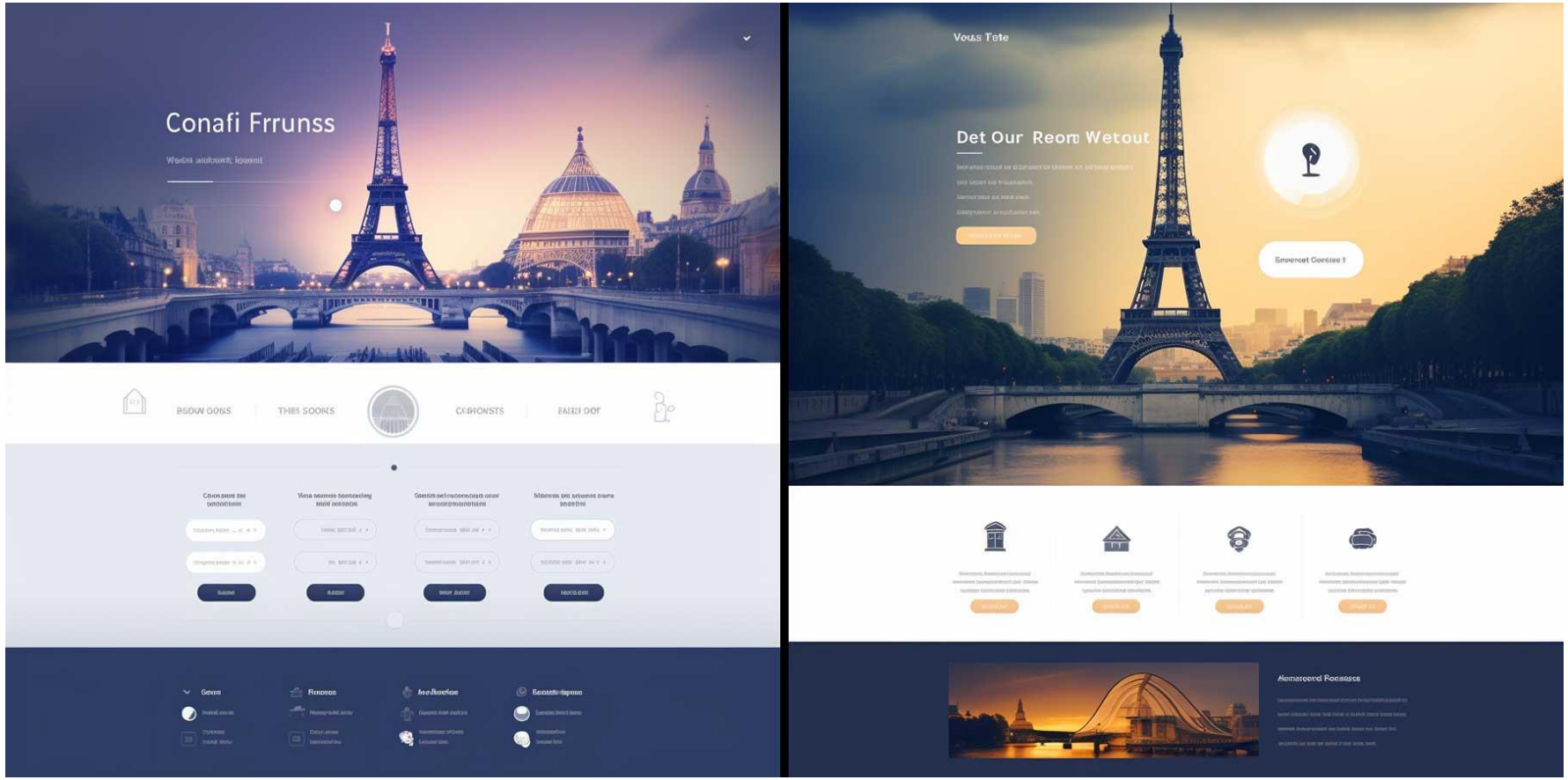
Imagery is one of the most important aspects of any website or marketing material. With the introduction of **AI art generators** in late 2022, anyone, regardless of the level of artistic ability, can create beautiful images for their projects. Between **Adobe Firefly**, **Stable Diffusion**, **Midjourney**, and others, there is no shortage of platforms. If you need more than images, these **AI design tools** can help you create brochures, social media templates, color palettes, and more.

Write Code



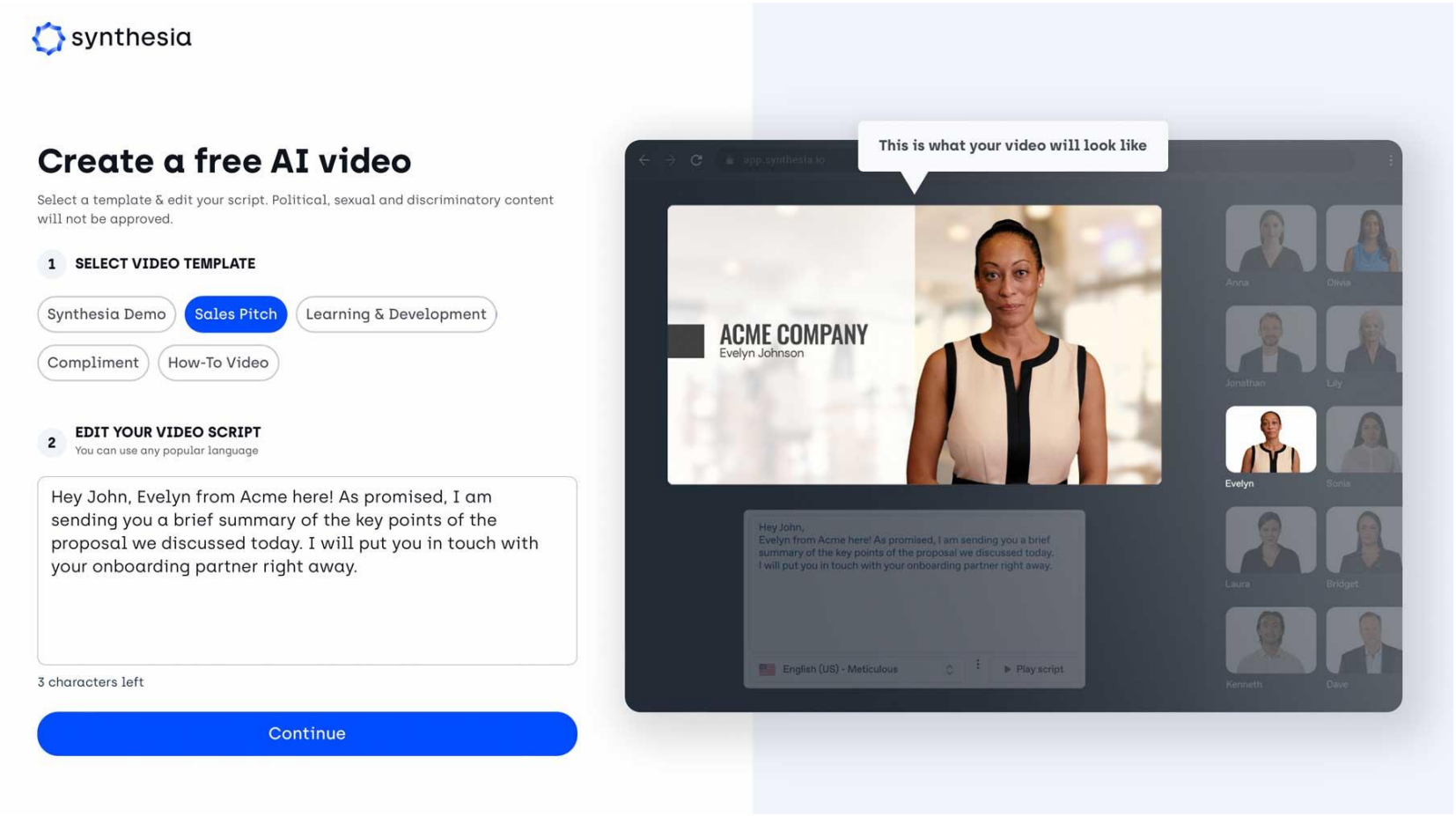
In the past, if you wanted to create a custom plugin or an entire static HTML, you'd need to prepare yourself for a long project. With the number of **AI coding assistants** hitting the market at the speed of light, you no longer have to spend countless hours coding on your own. Using software such as **GitHub Copilot**, you can code faster and more efficiently than ever before. The best part about these coding assistants is the majority of them will work alongside your favorite code editor, so you don't have to spend time learning a new platform.

Build Websites



Making a website is a lot easier now, thanks to **AI website builders**. Big players in the industry, such as **Wix** and **Hostinger**, have started offering services to streamline the process. You can answer a few questions through Wix and have a custom website in a few minutes. Other tools, like **Framer**, can generate a fully functional website with a text prompt. Alternatively, you can combine tools like **Midjourney and ChatGPT** to generate images and content for your new site. If you're a WordPress user, there are even a few **AI plugins** to make working in WordPress a lot easier.

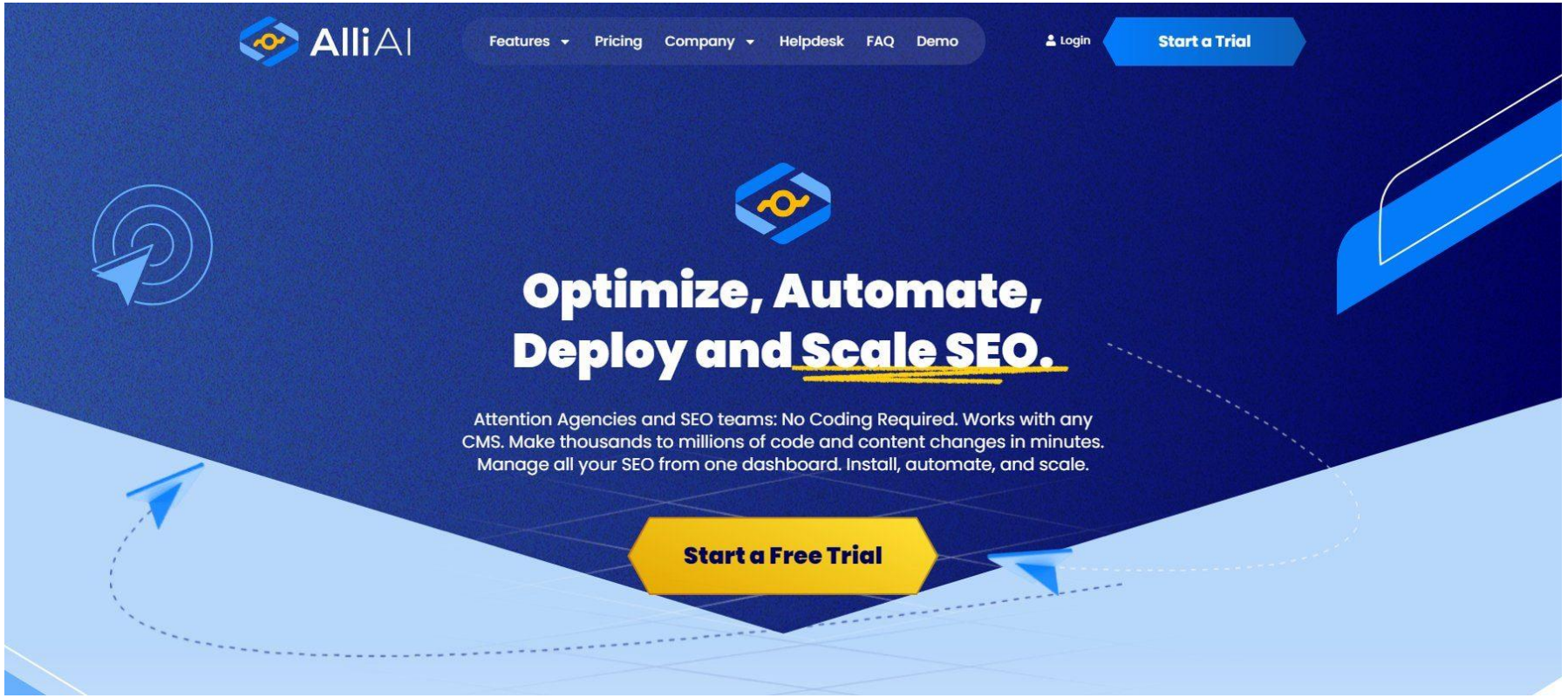
Generate Video Assets



Another excellent use of artificial intelligence is **AI video generators**. You can create marketing videos from a blog post URL using **Pictory**. Alternatively, you can create realistic training videos with animated avatars using Synthesia.

There are even programs, such as **Runway**, that will give you the tools to improve existing videos by adding slow-motion effects, making color enhancements, and removing artifacts.

Improve SEO



The last AI tools on our list can help you get your site's SEO up to par. With **AI SEO tools**, you can generate page titles and meta descriptions in bulk, rewrite copy, check for plagiarism, and develop SEO-friendly outlines, and more. Some tools, such as **Alli AI**, will help you quickly identify any SEO problem areas and provide steps to correct them.

QUESTIONS

We become what we behold.
We shape our tools,
and thereafter our tools shape us.
- Marshall McLuhan