

# AI Exploration

# Project

## Table Of Contents:

1) ChatGPT - AI Writing Assistance.....	2
2) Self Driving Cars.....	3
3) Facial Recognition.....	4
4) Voice Assistance.....	5
5) Traffic Control.....	6
6) Military Technology.....	7
7) Sports Analysis.....	8
8) Agriculture.....	9
9) Robotics.....	10
10) Study Organizer.....	11
11) Google Photos Search.....	12
12) Healthcare Diagnostics.....	13
13) Fitness Coaching Apps.....	14
14) Language Learner.....	15
15) Music Generator.....	16
16) Grammar and Writing Assistance.....	17
17) Mind Mapping.....	18
18) Environmental Monitors.....	19
19) Emotion Detection.....	20
20) Google Gemini Certification.....	21

# 1) ChatGPT - AI Writing Assistance



## **Description:**

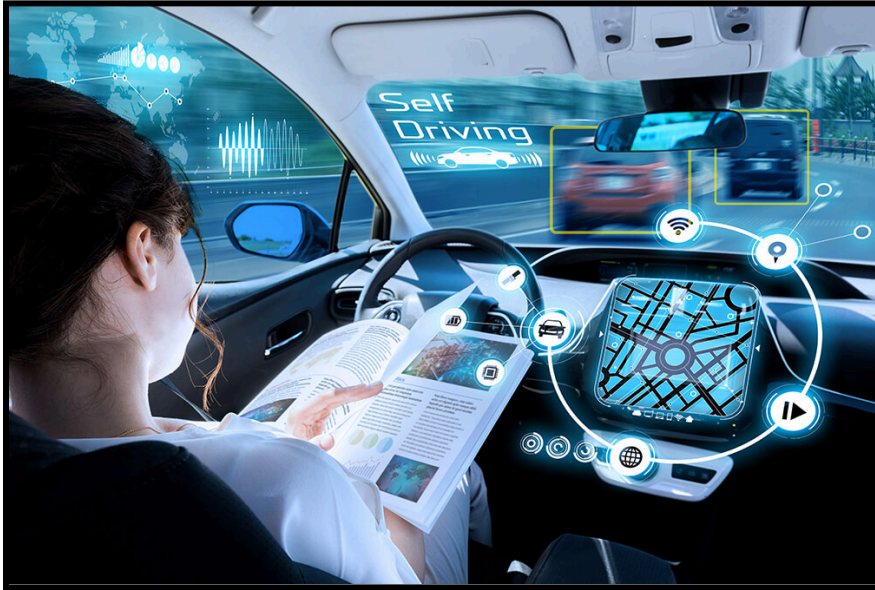
ChatGPT is an artificial intelligence chatbot created by OpenAI. It was launched in November of 2022, as it uses large language models to generate human-like text responses, answer questions, and assist with writing, studying, coding, and brainstorming.

## **Discussion:**

ChatGPT helps in my life a lot in the academic world at school, as it helps answer questions that I am confused about but also helps me learn new concepts. ChatGPT can be great with asking different questions from school work to my everyday life.

**Link:** [ChatGPT](#)

## 2) Self Driving Cars



### **Description:**

Self-driving cars use AI, sensors, and cameras to detect objects, read traffic signs, and drive without human control. Companies like Tesla and Waymo are developing this technology to soon use this in the future.

### **Discussion:**

This could reduce accidents caused by human error. However, I would feel nervous trusting a computer fully in dangerous driving situations, as it took Tesla a while to develop its own self-driving system with still having issues, as it would be a while to make a safe but good self-driving car.

**Link:** [Tesla Self Driving](#)

### 3) Facial Recognition



**Description:**

Facial recognition uses AI to identify or verify a person’s identity by analyzing facial features. It is used in smartphones and security systems as it is a much quicker way to access important information but also harder for people to get hacked or get their information stolen.

**Discussion:** I use Face ID on my phone every day on my Iphone and Ipad as its quick way to login into my device or passwords without anyone seeing. It’s convenient most times, but it raises privacy concerns because governments or companies could misuse facial data.

**Link:** [Apple Face Recognition](#)

## 4) Voice Assistance



**Description:** I voice assistants like Amazon Alexa and Google Assistant respond to voice commands. It can be a neat tool if you need an answer to a simple question answered quickly rather than searching it up on a device.

**Discussion:** They make daily tasks easier for me like setting reminders and alarms for the morning, but they are always listening, which concerns me a bit with the stories I have also heard online about them.

**Link:** [Amazon Alexa](#)

## 5) Traffic Control



**Description:** AI helps manage traffic flow by adjusting traffic lights and monitoring congestion. This has been used for years by robotics and machines, but some cities are changing to AI as being more consistent and reliable.

**Discussion:** This could reduce traffic and pollution as a better traffic system would mean less busy streets, as more room for bikers and everyday walkers. It would be helpful in busy cities like Vancouver as some places across town have very inconsistent traffic lights that don't do well to move traffic effectively.

**Link:** [Traffic Control Explained](#)

## 6) Military Technology

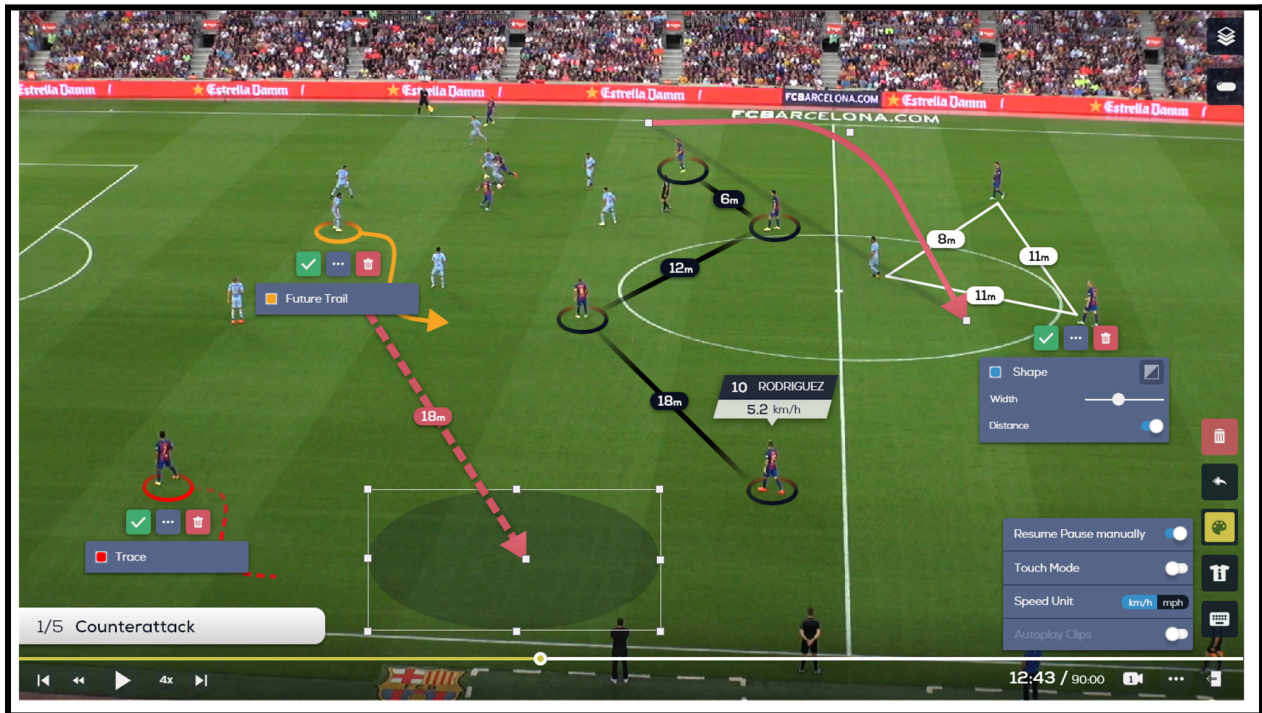


**Description:** AI is used in the military with drones and defense systems to identify threats and assist in combat decisions. These systems are developing a lot faster since they are much quicker than human systems in the military.

**Discussion:** This is one of the most controversial uses of AI. It could reduce human soldiers' risk but raises serious ethical concerns. The military might not fully rely on AI use on the military as they could see it as possibly getting information stolen if hacked.

**Link:** [Military AI Use](#)

## 7) Sports Analysis



**Description:** AI analyzes player movements, performance data, and game statistics to improve training and strategy. These stats can be used in video games to help make more accurate game/player stats but also statistics for the league in things like projected points or ball speeds.

**Discussion:** This makes sports more competitive and strategic. It shows how even athletics are becoming data-driven, as I enjoy seeing these advanced stats as they are not just cool but I also learn a lot more from watching and learning the game.

**Link:** [Expansion Of AI In Sports](#)

## 8) Agriculture

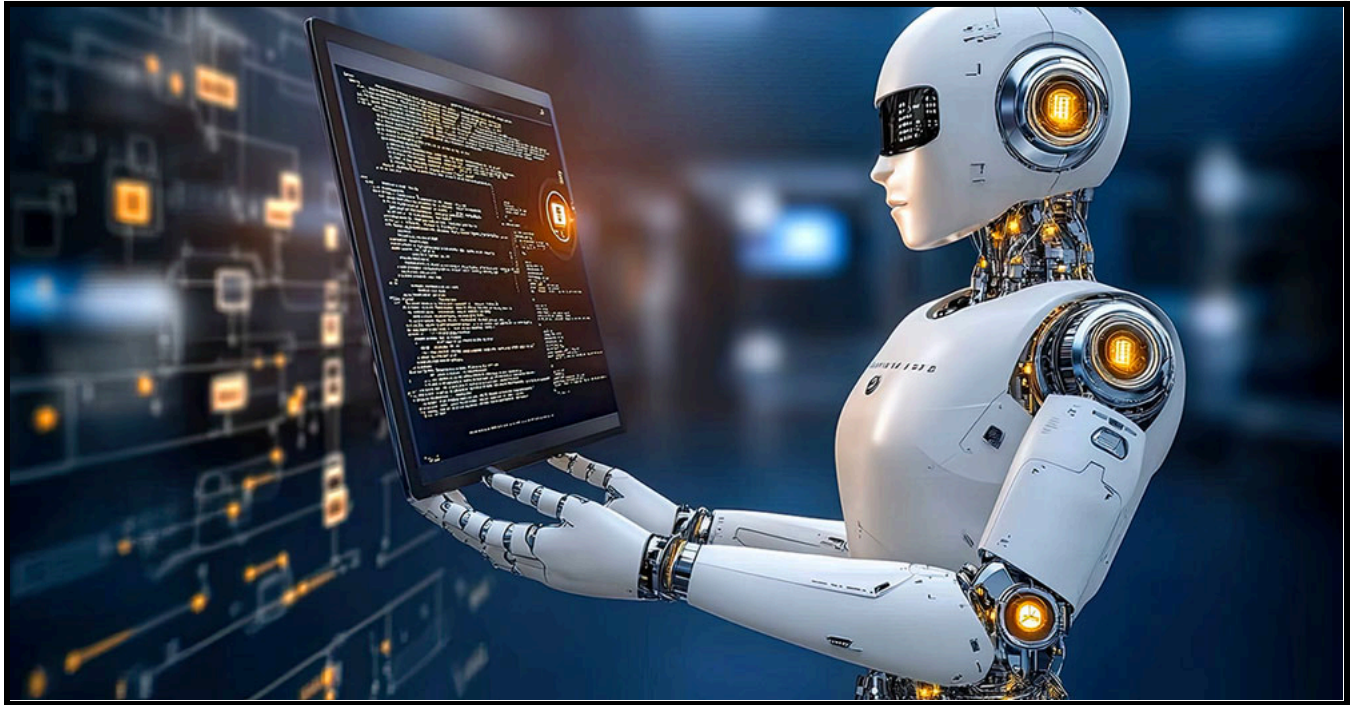


**Description:** AI helps farmers monitor crops, predict weather effects, and increase food production. It is a much faster and efficient way to grow crops as it would take less time using AI machinery. We are seeing this a bit in big agriculture countries that do a lot of farming.

**Discussion:** This could reduce food shortages and improve efficiency as I feel like farms in Vancouver do take a while to grow crops and also harvest them. These machineries would make dairy farms or fruit farms production increase rapidly in places like Delta and Richmond.

**Link:** [Agriculture Using AI](#)

## 9) Robotics

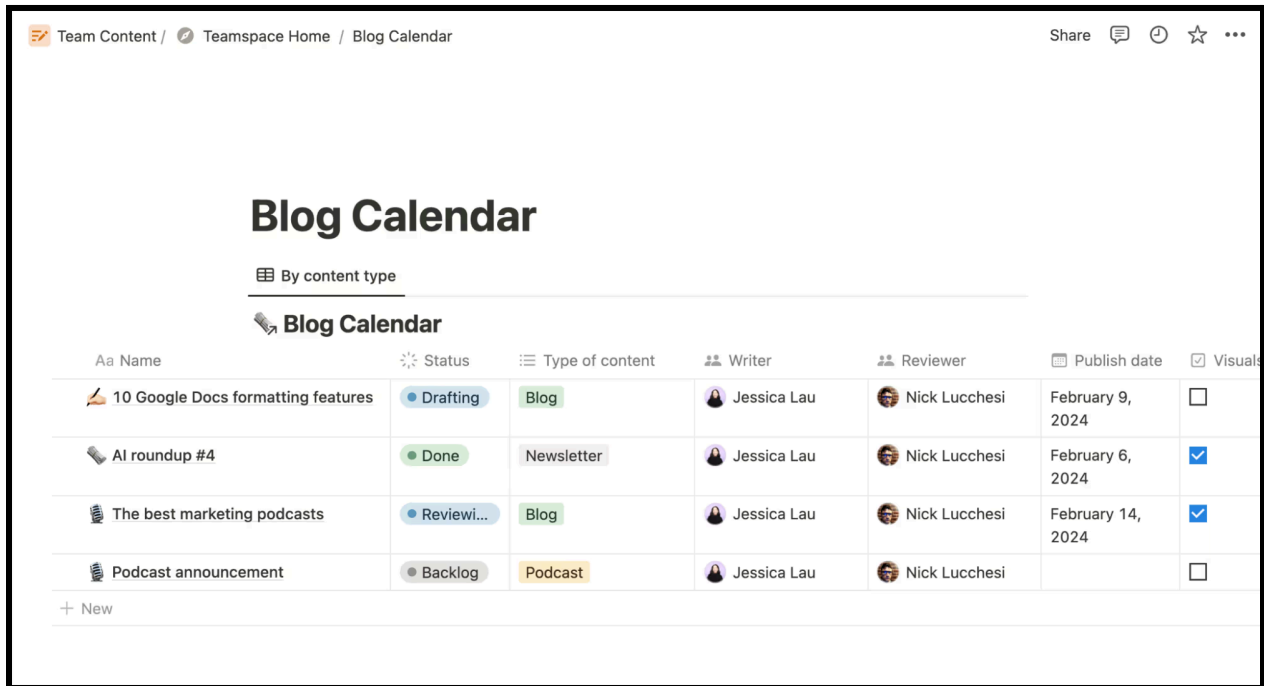


**Description:** AI allows robots to learn from experience and perform complex physical tasks. We are seeing many more designs of AI in robotics and being used in everyday life like households or working environments.

**Discussion:** Robots could help in dangerous jobs, but seeing human-like robots is both exciting and slightly unsettling. I feel like it would be good to have them in households to do small chores at the beginning and slowly upgrade its work load to more complex jobs in the future.

**Link:** [Gemini Robotics](#)

# 10) Study Organizer



The screenshot shows a Notion workspace titled "Blog Calendar" with a table of content items. The table has the following columns: Name, Status, Type of content, Writer, Reviewer, Publish date, and Visuals. The items listed are:

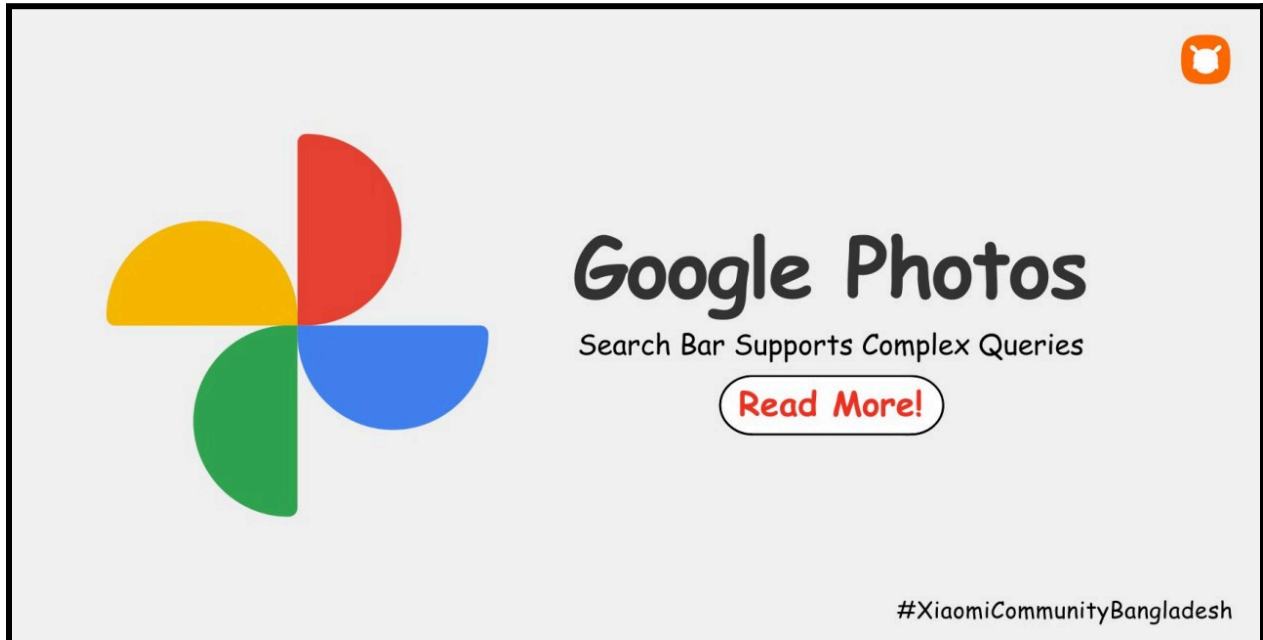
Name	Status	Type of content	Writer	Reviewer	Publish date	Visuals
10 Google Docs formatting features	Drafting	Blog	Jessica Lau	Nick Lucchesi	February 9, 2024	<input type="checkbox"/>
AI roundup #4	Done	Newsletter	Jessica Lau	Nick Lucchesi	February 6, 2024	<input checked="" type="checkbox"/>
The best marketing podcasts	Reviewi...	Blog	Jessica Lau	Nick Lucchesi	February 14, 2024	<input checked="" type="checkbox"/>
Podcast announcement	Backlog	Podcast	Jessica Lau	Nick Lucchesi		<input type="checkbox"/>

**Description:** Notion AI helps summarize notes, organize tasks, and generate study plans automatically. It's a really good app if you have many things that don't fill in a calendar, as it has many different sections to organize work but also put notes down.

**Discussion:** This could help when researching for school projects because it gives quick explanations and sources. I use this notion a lot for school work, as it separates mini assignments with huge tests, as I also put my sports schedule for Hockey and outside events to help me stay organised.

**Link:** [Notion](#)

# 11) Google Photos Search



**Description:** Google Photos uses AI to recognize faces, objects, and locations in images so they can be searched easily. It's good to help find photos from the internet to find more information about them or find the source it came from.

**Discussion:** This makes it easier to find photos quickly without scrolling through thousands of pictures. I use it for some of my projects when needing sources to make my work cited especially for classes like socials or english.

**Link:** [Google Photos](#)

## 12) Healthcare Diagnostics

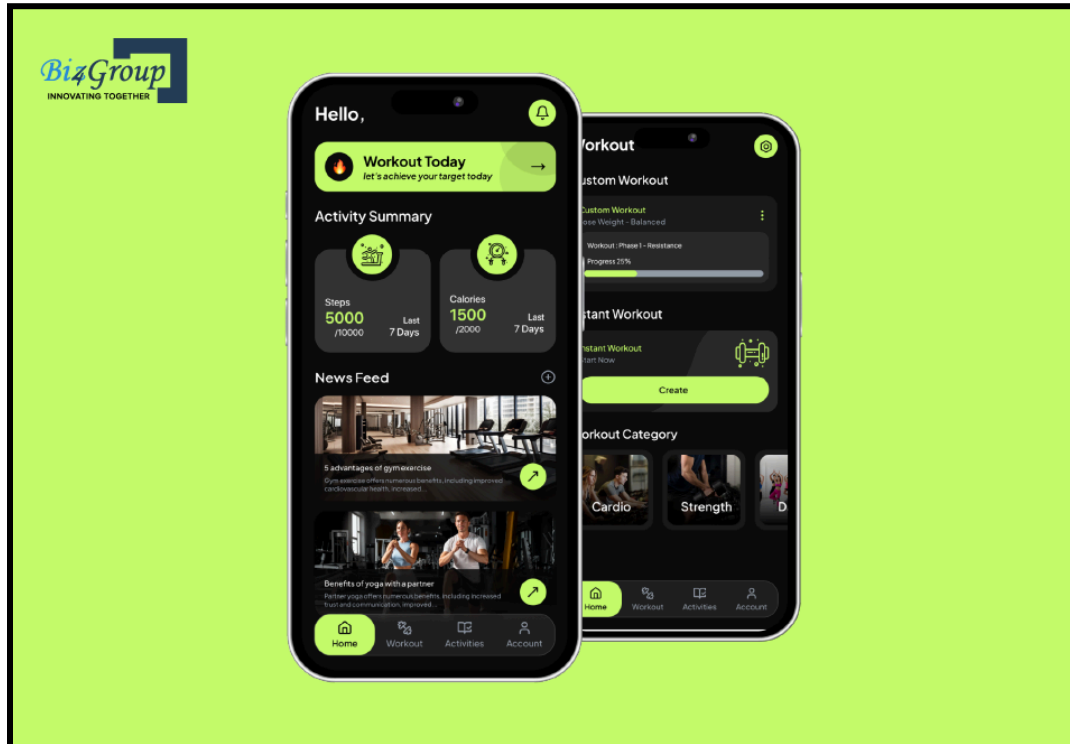


**Description:** AI systems can analyze medical images like X-rays or MRIs to help doctors detect diseases earlier. This might be something we see a lot more in the future, as technology and robots are starting to take over.

**Discussion:** AI could help improve healthcare by finding illnesses faster and helping doctors make better decisions. This would make the work force for doctors decrease a lot with surgeries and finding data in healthcare being taken care of from technology.

**Link:** [IBM Products](#)

## 13) Fitness Coaching Apps



**Description:** Some fitness apps use AI to analyze workouts and suggest personalized training plans. We will probably see this more often in the future as people will use less trainers and are going through technology more with these online workout apps.

**Discussion:** This could help people stay healthy by giving customized fitness advice. I am moving more towards workout apps as I find them as effective as personal trainers as they are a lot cheaper and some are even free.

**Link:** [Fitness App](#)

## 14) Language Learner

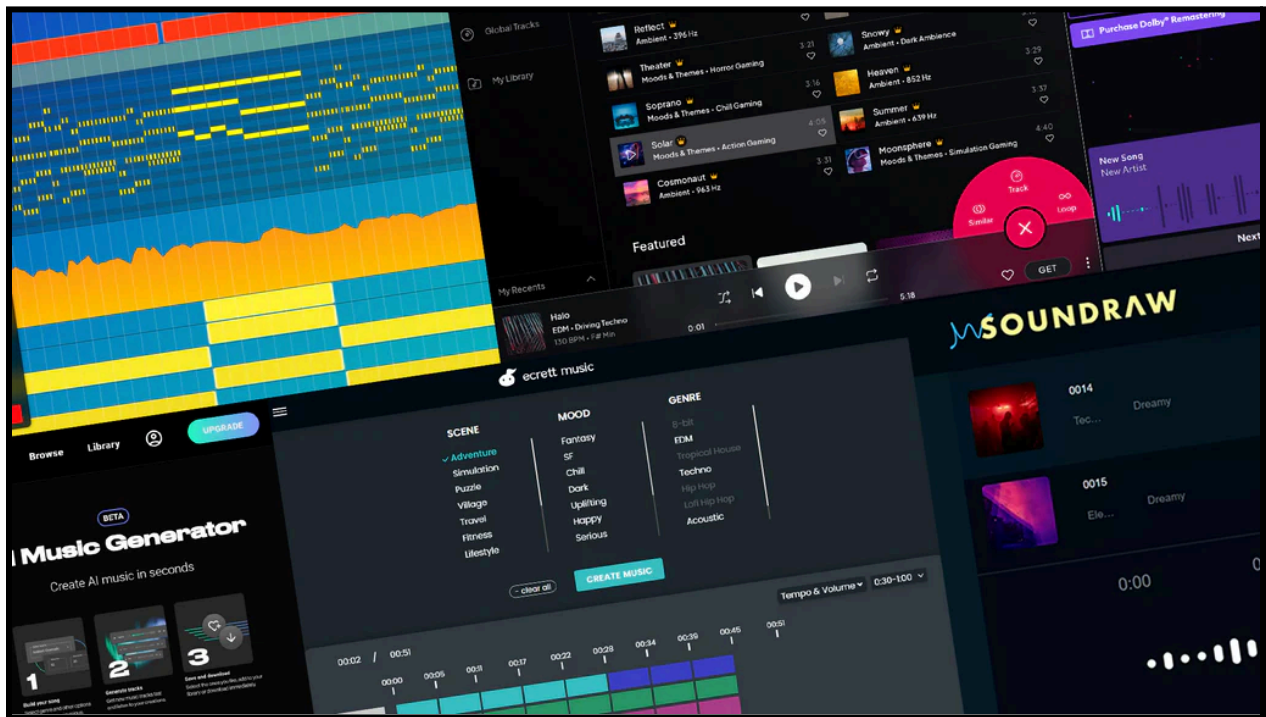


**Description:** Duolingo uses AI to adapt lessons based on how well the learner performs. It is a good way to make a website effective and quick so people can work through learning something new at a fast or slow pace.

**Discussion:** AI helps personalize learning so people can improve languages faster. This could be helpful in classes where people are struggling in our school like French, Spanish, Mandarin, etc, as I used Duolingo a lot for French help.

**Link:** [Duolingo](https://www.duolingo.com)

# 15) Music Generator

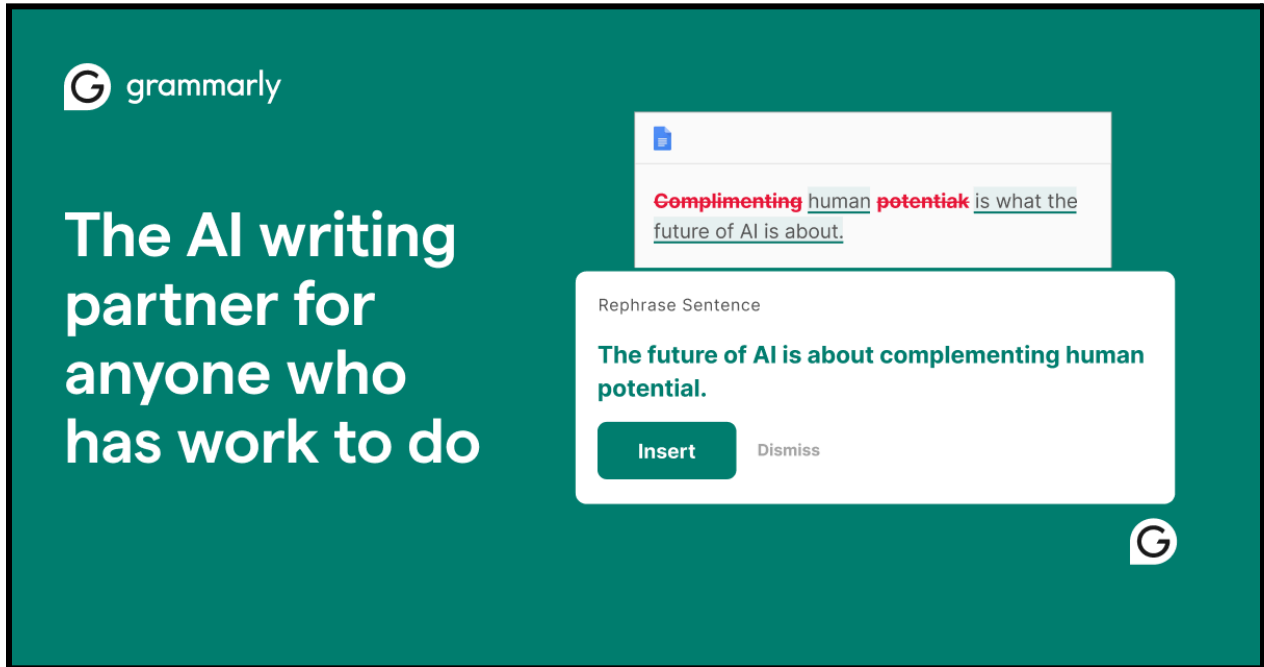


**Description:** Soundraw uses AI to generate music based on style, mood, and length. It is a good way to generate beats that are already made or different music features people would like rather than taking a longer time to find different beats and features to put them together.

**Discussion:** This could help people create background music for videos or projects without needing musical skills. I would personally use this for already created beats for background music in podcasts for school assignments.

**Link:** [Sound Draw](https://www.soundraw.io)

# 16) Grammar and Writing Assistance

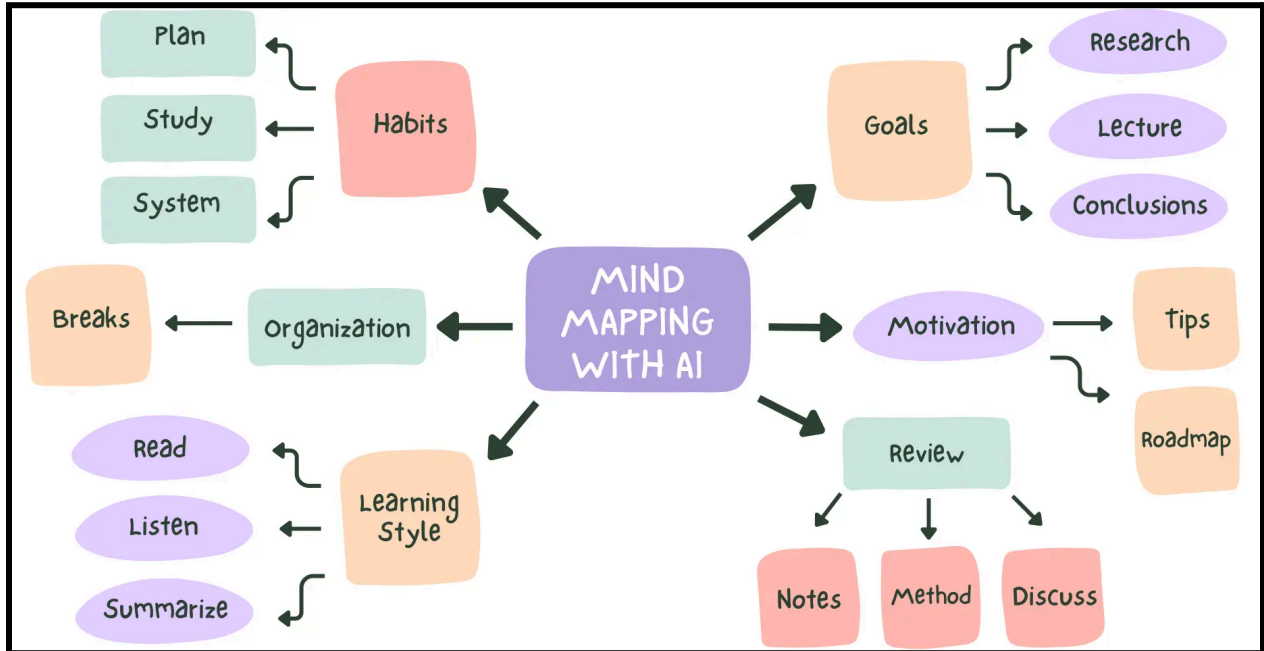


**Description:** AI writing assistants such as Grammarly analyze written text and suggest improvements for grammar, spelling, clarity, and tone. These tools help writers improve the quality of their work by catching mistakes and offering better wording suggestions.

**Discussion:** This is helpful in my life because I write essays and assignments for school. AI tools can help me catch mistakes I might miss and improve my writing skills over time. At the same time, it's important that I still think about the suggestions instead of automatically accepting everything the AI says. The use of grammarly is good because it's more of telling you what and why it's wrong rather than just doing the work on your own.

**Link:** [Grammarly](https://www.grammarly.com)

# 17) Mind Mapping



## Description:

Some AI tools can take a topic or notes and automatically generate a visual mind map with branches, categories, and connections. This helps organize complex ideas and see relationships between concepts.

## Discussion:

I could use this when planning essays or projects because it would help me structure my ideas clearly. It makes brainstorming faster, but I still need to think critically about how ideas connect instead of blindly following the AI map.

Link: [Mind Meister](#)

# 18) Environmental Monitors

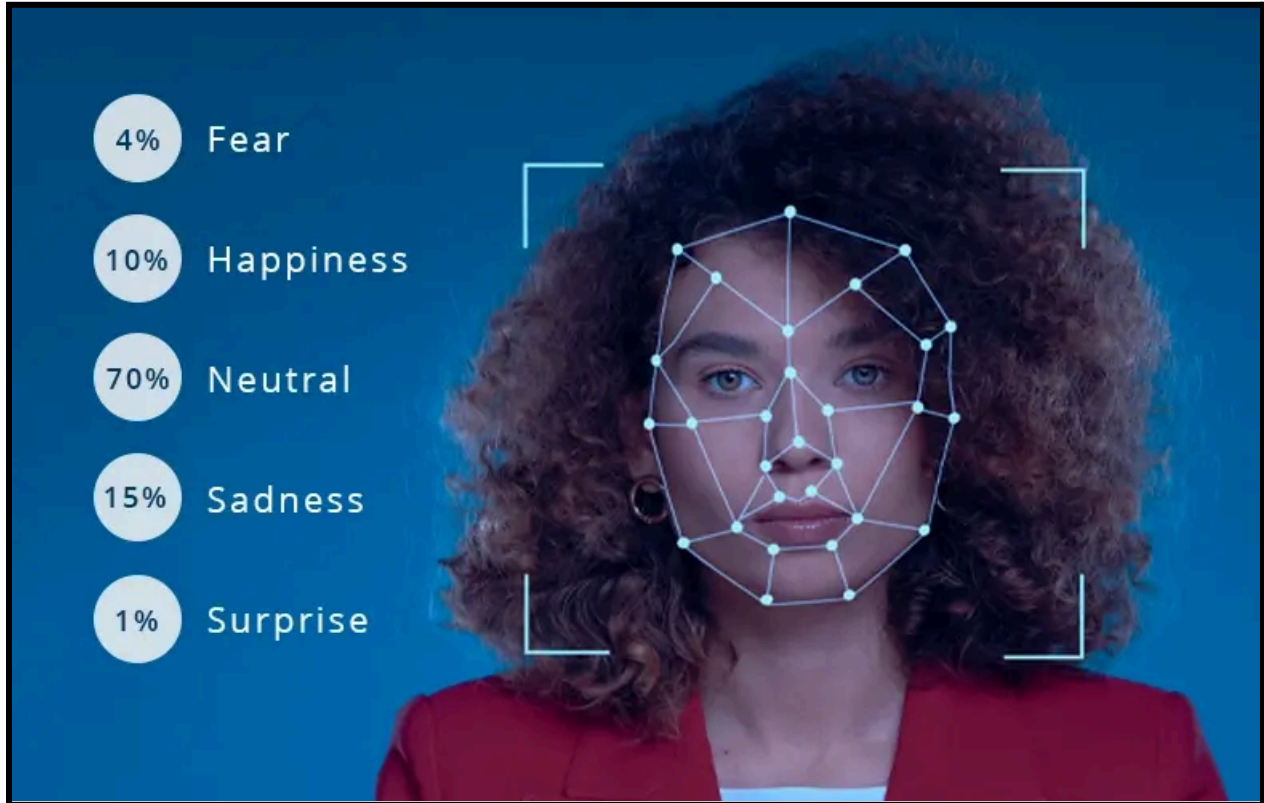


**Description:** AI can analyze environmental data to predict air quality, track deforestation, or forecast natural disasters. These insights support sustainability and disaster preparedness.

**Discussion:** I could see this affecting my life indirectly by helping communities respond to environmental changes. It's a good example of AI being used ethically for the common good or for research in a school project if you have reliable evidence.

**Link:** [Climate AI](#)

# 19) Emotion Detection



**Description:** Some AI systems can analyze facial expressions, voice tone, or text to detect emotions. These tools are used in marketing, healthcare, and education as they are useful tools to help collect reliable data.

**Discussion:** This is fascinating but also raises privacy concerns. In my life, it could help teachers notice when students are struggling, but I would worry about constant monitoring.

**Link:** [Affectiva](#)

## 20) Google Gemini Certification

