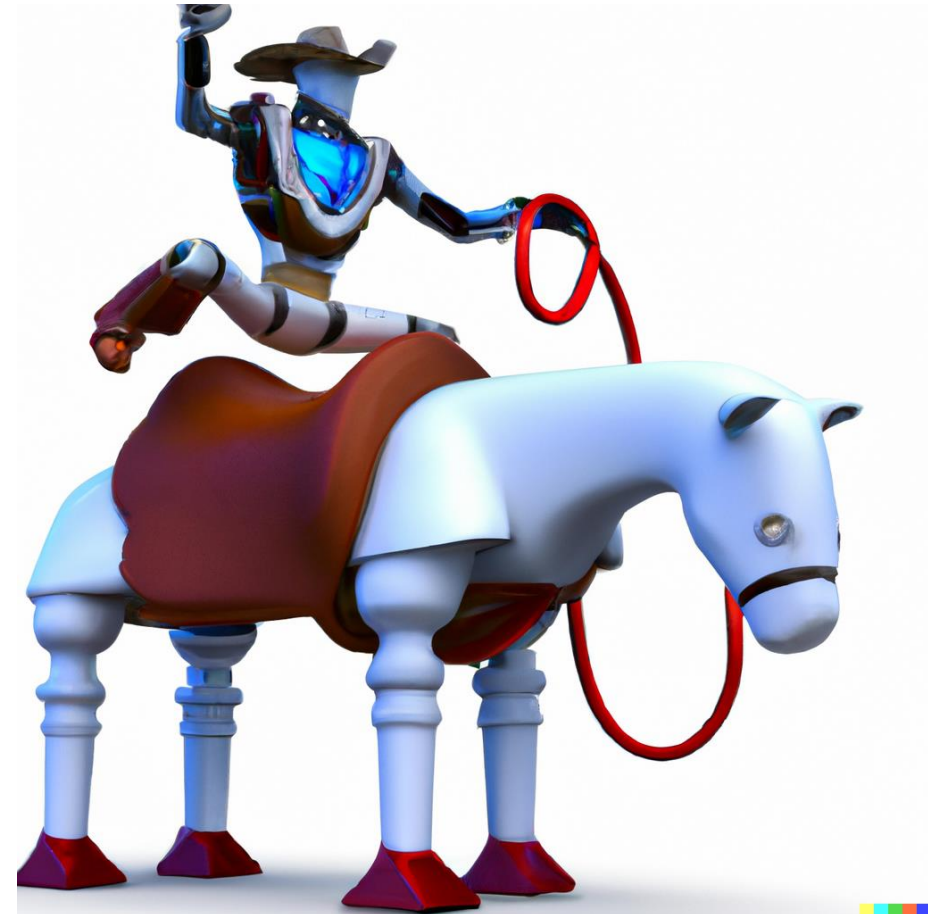


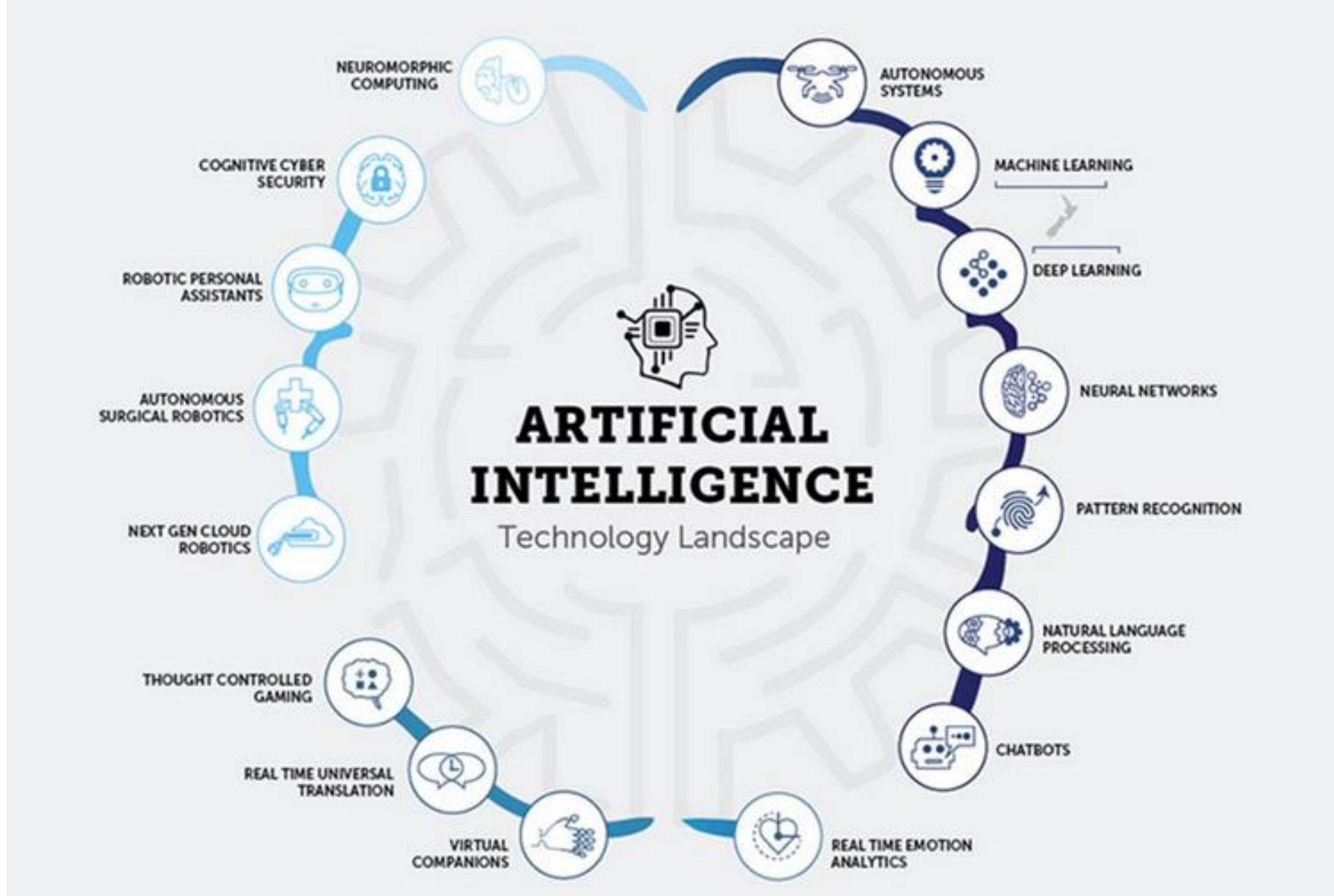
Taming Wild Technology

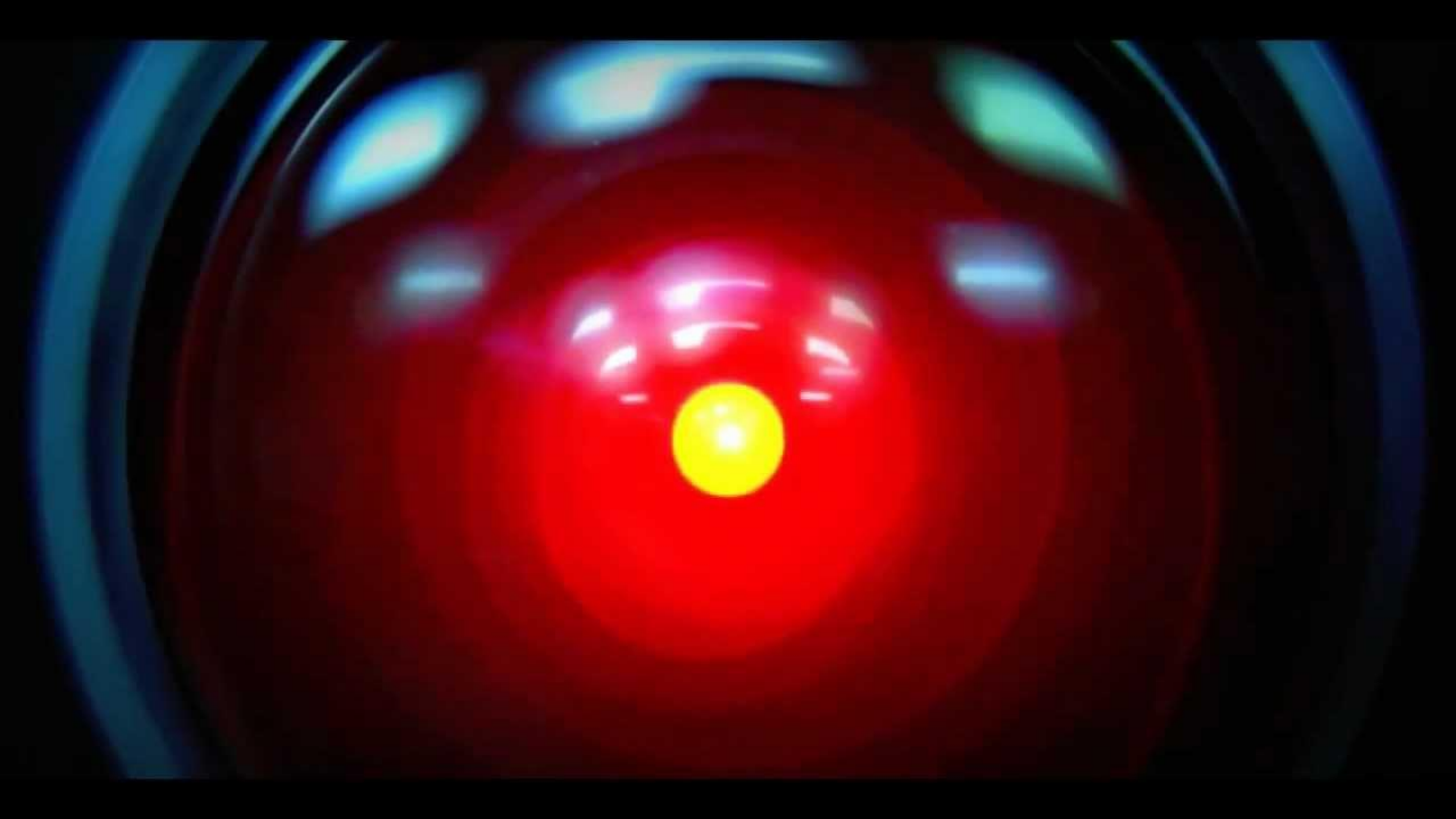
Suzanne Reymer
Montana State Library
MLA 2023



ChatGPT suggestions

1. Digital literacy: Being proficient in digital technologies and promoting digital literacy among patrons, particularly in areas such as online safety and privacy.
2. Cloud computing and storage: Understanding cloud-based technologies and their applications in storing and accessing library resources.
3. Mobile devices: Familiarity with mobile devices and the various apps and services that can be used to access library resources.
4. Social media: Knowledge of how social media can be leveraged to promote library services and engage with patrons and communities.
5. Artificial intelligence and machine learning: Understanding of how AI and machine learning can be applied to improve library services, such as recommendation systems and natural language processing.





In the News

NASA-enabled AI Predictions May Give Time to Prepare for Solar Storms

MEDIA · Published March 30, 2023 9:09am EDT

'Shark Tank' star offers AI solution to prevent mass shootings: 'Monitoring the output of disturbed people'

'Shark Tank' investor suggests utilizing artificial intelligence to monitor social media posts, messages linked to potential mass shootings

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TECH
Elon Musk
for pause on
A.I. as advan

PUBLISHED WED, MAR 29 2023 8:23 AM EDT | UPDATED WED

as human
as race
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Large language
tasks.

300 million jobs could be affected by latest wave of AI, says Goldman Sachs
Police Surveillance Tech
In the Middle East, artificial intelligence and other emerging technologies have become part of everyday policing.

Branches of AI

- Machine Learning – the development of algorithms and statistical models that enable computer systems to learn from data without being explicitly programmed - ChatGPT, computer-generated images, voice assistants...
- Natural Language Processing – program computers to process and analyze large amounts of natural language data – chatbots, machine translation
- Computer Vision - enables computers to interpret and understand visual data from the world around them – image processing, facial recognition
- Robotics

AI Humor Break

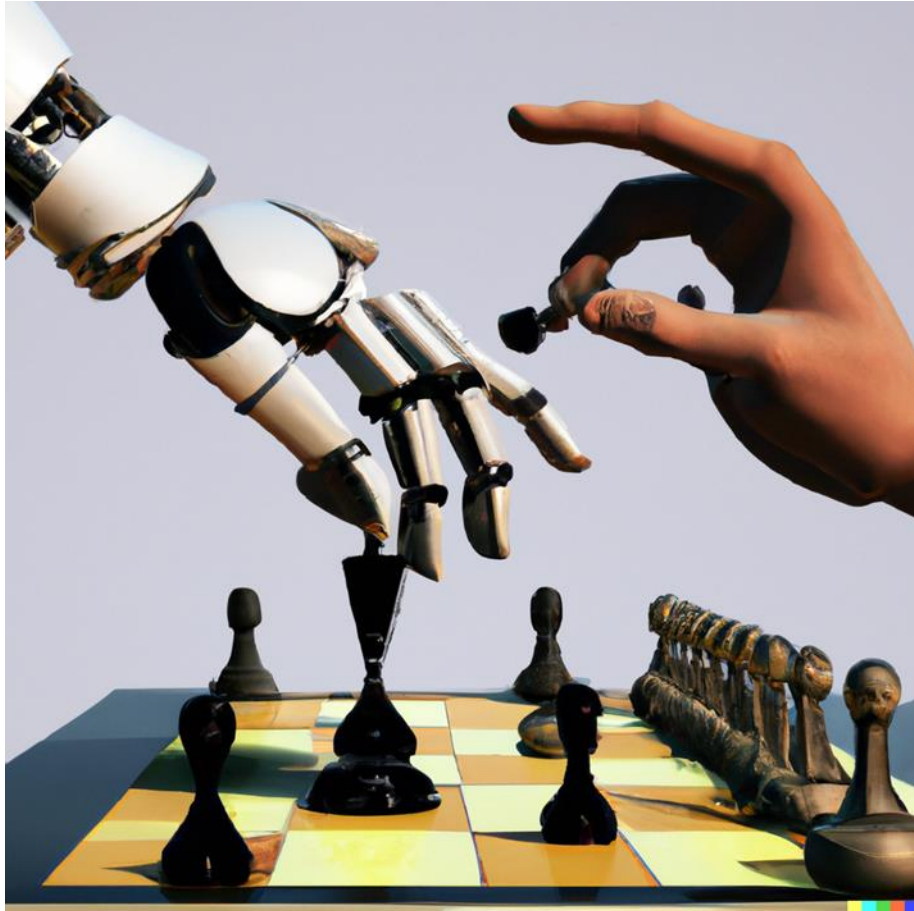
- Joke 1: Why did the computer go to art school?
Because it wanted to learn how to draw a better "byte"!
- Joke 2: Why do robots love to visit the beach?
Because they love to surf the 'net!
- Joke 3: Why was the computer cold at the office?
It left its Windows open!

Don't quit your day job for a career in stand up, Chat GPT!

From Turing Test to Self Driving Cars



From Chess to Alexa



Algorithms

An algorithm is a set of instructions that a computer program follows to complete a task

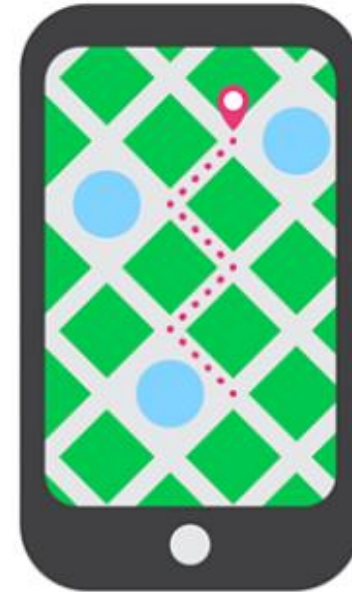
- Recipe
- Directions

I can't find the park

The type of algorithm we would use to find our way is called a set of **directions**.

The directions might be a list of instructions telling us where to go, or a line drawn on a map.

There could be different ways to get to the park and there would be a different algorithm for each one.



<https://www.bbc.co.uk/bitesize/topics/z3tbwmn/articles/z3whpv4>

Chat GPT – Generative Pre-Trained Transformer

Generative AI is a type of artificial intelligence technology that can produce various types of content including text, imagery, audio and synthetic data. It is used to create new content - a text, an image, even computer code - by learning how to take actions from past data.

The recent buzz around generative AI has been driven by the simplicity of new user interfaces for creating high-quality text, graphics and videos in a matter of seconds.

Given an initial text as prompt, it will produce text that continues the prompt.

ChatGPT PLUS

Could you introduce yourself to Montana librarians?





Could you introduce yourself to Montana librarians?



Hello Montana librarians! I am ChatGPT, a large language model trained by OpenAI. I am an artificial intelligence program designed to assist with a wide range of tasks, including answering questions, providing information, and generating text. I am based on the GPT-3.5 architecture, which allows me to understand and generate human-like language. As a language model, I have been trained on a vast corpus of text, enabling me to provide relevant and accurate answers to a wide variety of questions. I am excited to be here to assist you in any way I can!





As a language model, I can be a valuable resource for librarians in many ways. Here are a few ways you can use me:

1. **Research assistance:** I can help you find information on a wide range of topics. Just provide me with a question or topic, and I can provide you with relevant sources of information, including articles, books, and websites.
2. **Reference assistance:** If you need help answering a specific question, I can provide you with a clear and concise answer. I can also help you with citations, grammar, and formatting.
3. **Collection development:** I can provide you with recommendations for books and other materials based on the interests and needs of your library's patrons.
4. **Programming ideas:** If you need inspiration for library programs and events, I can suggest ideas based on current trends and popular topics.

To use me, simply ask your question in natural language, and I will do my best to provide a helpful response. Remember, while I can provide information, I am not a substitute for a human librarian, and I cannot provide legal or medical advice.

Bing

Set tone of responses Preview

More Creative **More Balanced** More Precise

Welcome back! What would you like to chat about?

What are some of the computer generated image programs available to the public? ➤

79/2000 📌

Some of the best AI image generators available to the public are:

- **DALL-E 2:** A neural network that can generate images from textual descriptions ².
- **Midjourney:** A tool that can be used to generate realistic images from text ³.
- **Stable Diffusion:** An open-source machine learning image generator that can create images from text ⁴.

These tools can be used to create unique paintings, drawings, and other types of visual art without the need for any artistic skill or experience ¹.

Learn more:

1. aiseo.ai

2. zapier.com

3. fotor.com

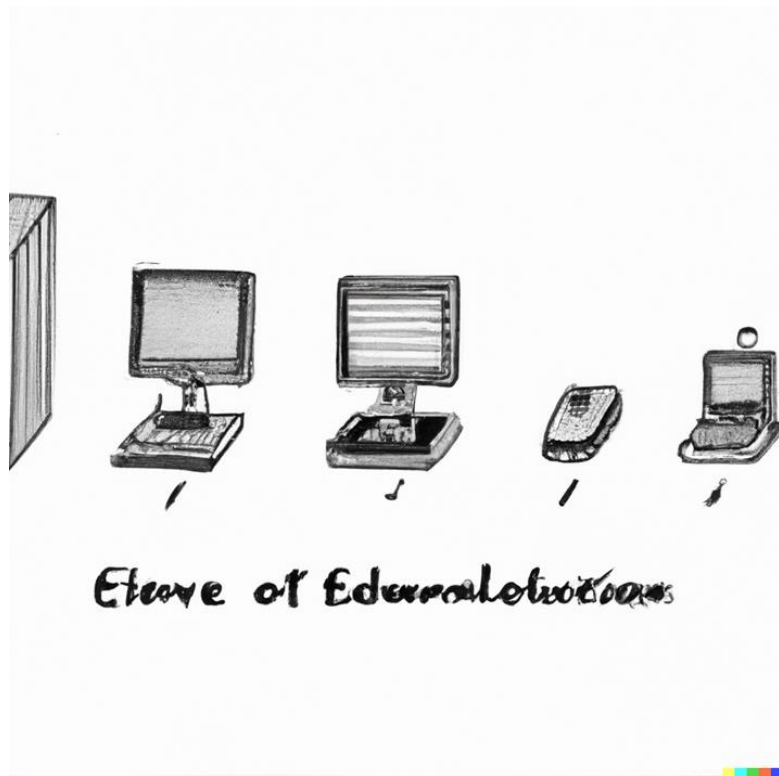
4. howtogeek.com

Image Generation



Sometimes the results are less satisfying AKA the Importance of Prompts

A drawing illustrating the evolution of computers



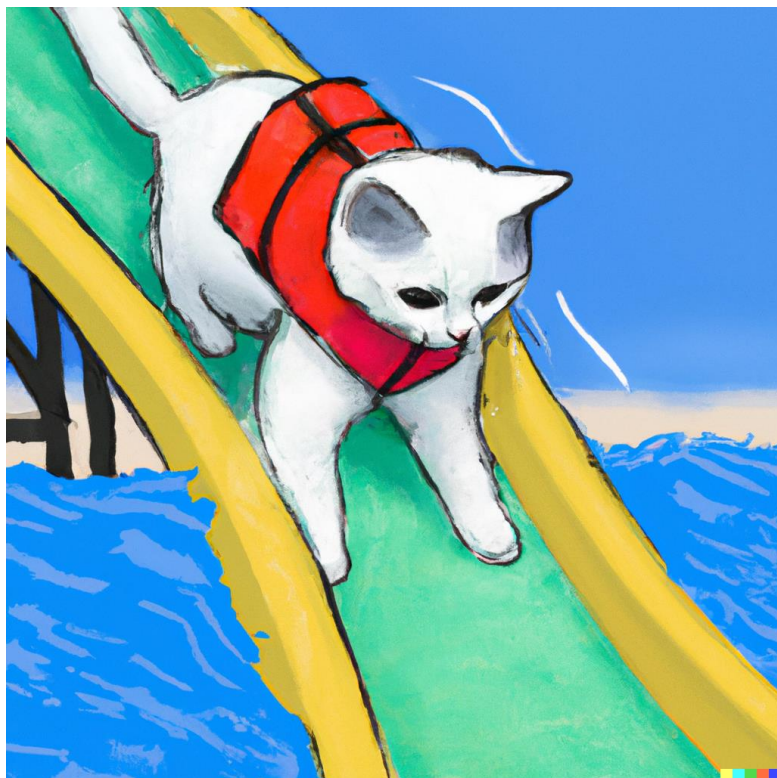
General Dynamics robot dog dressed in giant spider costume



“Knowledge workers must know how to use generative systems and prompts to generate value going forward.” – Amy Webb

Different results from different models

DALL-E



Stable Diffusion



Call Samantha!

Your always available AI friend

(640)-225-5726

Memo: (640)-CALL-SAM

Or, save the number


What should we talk about?

- . Ask Sam for fun things to do in new places
- . Talk through your new business ideas











The AI community building the future.

Build, train and deploy state of the art models powered by the reference open source in machine learning.

 Star 90,479

More than 5,000 organizations are using Hugging Face

 Allen Institute for AI Non-profit · 154 models	 Meta AI Company · 669 models	 Graphcore Company · 37 models	 Google AI Company · 587 models
 Intel Company · 92 models	 SpeechBrain Non-profit · 69 models	 Microsoft Company · 244 models	 Grammarly Company · 1 model

GATO – Generalized AI

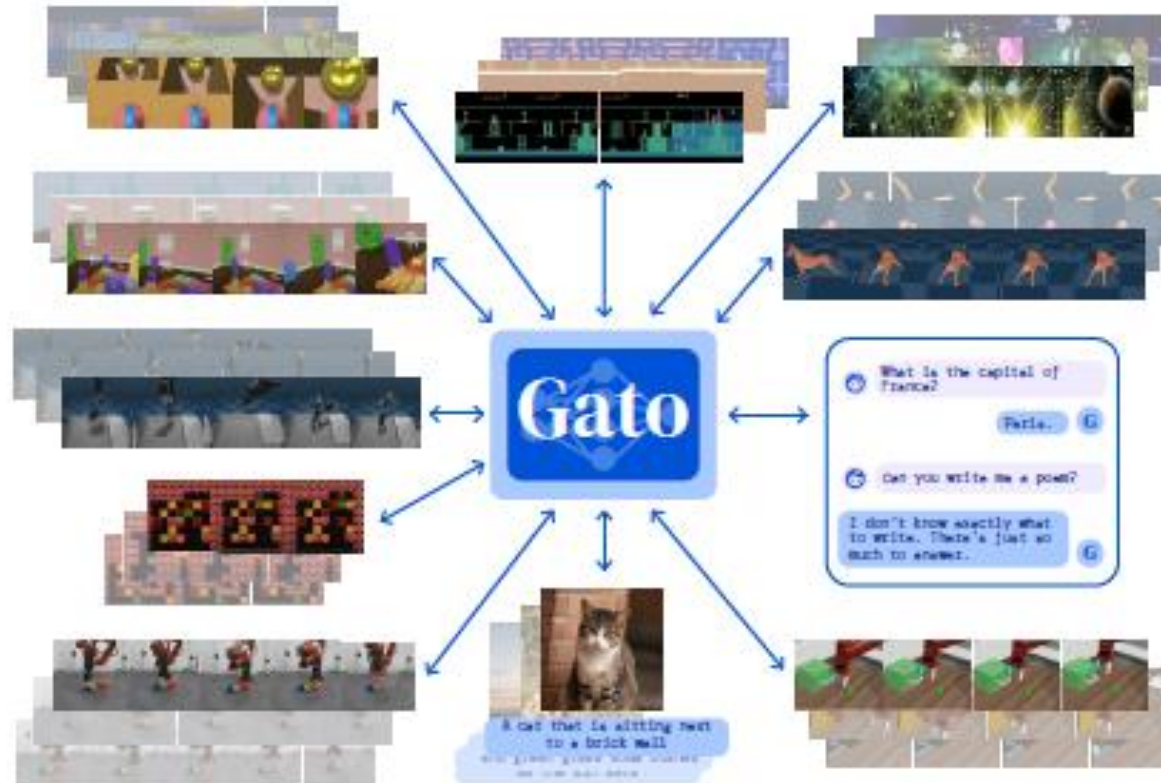


Figure 1: A generalist agent. Gato can sense and act with different embodiments across a wide range of environments using a single neural network with the same set of weights. Gato was trained on 604 distinct tasks with varying modalities, observations and action specifications.

The Evolution of AI

ANI

Artificial Narrow
Intelligence

AGI

Artificial
General
Intelligence

ASI

Artificial Super
Intelligence

AI Issues

What are your fears about how AI will shape our future?

“Maybe some people think it will be like the apocalypse in the Terminator films. But we should actually be scared by another apocalyptic scenario: the end of the middle class. It's much, much easier to have an AI act as a surrogate for an accountant than for a blue-collar worker like a plumber or a builder. This means we could have a future in which the majority of people will have low-paid jobs, with the rest taken by machines. That inequality could be really dangerous. The gap created between poor and rich could lead to general conflicts, radical societal transformations and other unknown fallouts.” - Paolo Benanti

The Pope's AI adviser. By: Benanti, Paolo, Lytton, Charlotte, New Scientist, 9/10/2022

Ethical Considerations

Bias and Fairness in AI Algorithms

Privacy and Data Security Concerns

Intellectual Property Rights

Transparency and Explainability of AI Decisions

AI Applications in Libraries

Overview of Key Applications

- Automated cataloging and classification
- Chatbots and virtual reference services
- Personalized reading recommendations
- Collection development and management
- Sentiment analysis for user feedback
- Predictive analytics for resource allocation

Future Trends and Challenges



AI-powered Smart Libraries



AI in Digital Preservation and Archiving



AI in Information Literacy and Learning



Addressing the Digital Divide

Conclusion

Emphasize

Emphasize the Potential Benefits of AI in Libraries



Encourage

Encourage Librarians to Stay Informed about AI Developments



Inspire

Inspire Librarians to Explore and Experiment with AI Technologies



| Continue the conversation...
| sreymer2@mt.gov