

Artificial Intelligence and Square Dancing

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By the end of this talk you will have seen examples of chatting with a computer program about square dance calling and dancing, and asking another computer program to draw pictures about the same subjects.

What is Artificial Intelligence (AI)?

The simulation of human intelligence in computers that are designed to think and act like humans. This could include vision, image, speech, decision making, and the ability to learn.

What is a chatbot?

Chatbots are computer programs that are capable of maintaining a conversation with a user in natural language, understanding their intent, and replying based on preset rules and data.

We already use devices that accept speech input and seem to have some intelligence behind them:

- Siri (Apple, 2010)
- Alexa (Amazon, 2013) — I will call it Alex in my talk so as not to trigger it since there is one in my room
- Google Assistant (Google, 2017)

Today we will look at ChatGPT. It was launched as a prototype on November 30, 2022, and quickly garnered attention for its detailed responses and articulate answers across many domains of knowledge.

I will start with some questions I asked it and later posted on sd-callers:

Q: Explain why square dancing is dying.

Square dancing has been in decline in recent decades due to a number of factors. One major reason is that it is seen as an old-fashioned activity that is not as relevant to modern society. Additionally, as people's lives have become more hectic and busy, they have less time to devote to hobbies and leisure activities.

Furthermore, square dancing requires a certain level of physical ability and coordination, which can be challenging for some people, especially as they age. Finally, there is a lack of exposure and interest from the younger generation.

Q: How do we get more people to try square dancing?

There are several ways to get more people to try square dancing:

- Hosting community events and open houses where people can come and try square dancing for free.
- Partnering with local organizations, such as schools or senior centers, to offer square dancing classes.
- Advertising and promoting square dancing through social media and local newspapers.
- Offering beginner-friendly classes and workshops to attract new dancers.
- Reaching out to local dance clubs and groups to collaborate on events and workshops.
- Creating a welcoming and inclusive environment for people of all ages and backgrounds to participate.

Q: Write a square dance haiku

Step in time, round

Partners spin, hearts entwine

Square dance, love found

Q: How hard is it to call a square dance?

The difficulty of calling a square dance can vary depending on the caller's experience and skill level. Some callers may have years of experience and are able to lead a square dance with ease, while others may be new to the role and find it more challenging.

Calling a square dance involves not only knowing the steps and calls for the dance but also the ability to lead and guide the dancers through the dance. The caller must be able to communicate clearly and effectively, and be able to adjust the pace and difficulty of the dance to suit the dancers. Additionally, callers need to have a good sense of timing, rhythm, and an understanding of music.

It's also important to have a good understanding of the dancers' skill levels, and to be able to adapt the calls to their abilities. Being able to read the dancers and adjust the calls on the fly is a key skill for a square dance caller.

Overall, calling a square dance can be challenging, but with practice and experience, it can become easier. It's a skill that can be learned and honed over time.

Q: What is your favorite square dance sequence?

As an AI model, I don't have personal preferences or experiences, so I don't have a favorite square dance sequence. Square dance sequences can vary depending on the style and level of difficulty, and it's up to the dancers' and the caller's preferences. Some callers may prefer traditional square dance sequences while others may prefer more modern, contemporary sequences. Some dancers may enjoy more challenging sequences that require more complex footwork, while others may prefer simpler, more basic sequences. There is no right or wrong answer when it comes to square dance sequences, it's all about enjoying the dance and having fun.

Q: write a short square dance sequence

Here is a short square dance sequence:

- Heads Square Thru (4 counts)
- Touch 1/4 (2 counts)
- Scoot Back (4 counts)
- Swing Thru (4 counts)
- Boys Run (4 counts)
- Bend the Line (4 counts)
- Right and Left Grand (8 counts)

This is just one example of a square dance sequence, and it's suitable for a beginner level. There are many different square dance sequences that can be used depending on the skill level of the dancers and the caller's preference. It's important to note that the sequence should be called by a square dance caller, and the dancer should be familiar with the basic square dance calls.

Q: Write a square dance sequence using chase right

Here is a short square dance sequence using the call "Chase Right":

- Heads Square Thru (4 counts)
- Touch 1/4 (2 counts)
- Chase Right (8 counts)
- Swing Thru (4 counts)
- Boys Run (4 counts)
- Bend the Line (4 counts)
- Right and Left Grand (8 counts)

This sequence is an example of how the call "Chase Right" can be incorporated into a square dance sequence. The call "Chase Right" is a movement where the dancers move clockwise around the square, passing one another by the right side. It's a fairly common call and it's a great way to get the dancers moving around the square. As always, it's important to have a clear communication and to have the dancers familiar with the basic square dance calls.

Q: What will square dancing be like in 2050?

It's difficult to predict exactly what square dancing will be like in 2050 as it depends on many factors such as societal trends, technology advances and the evolution of the art form itself. However, it's likely that square dancing will continue to evolve and adapt to the changing times.

One possibility is that square dancing may become more technologically advanced, with the use of virtual and augmented reality to enhance the dancing experience. Dancers may use virtual reality headsets to transport

themselves to different locations or even different eras, and augmented reality could be used to enhance the visual effects of the dance floor.

Another possibility is that square dancing may become more diverse and inclusive, reflecting the changing demographics of society. The calls and music may become more varied, drawing from different cultures and styles.

Perhaps, square dancing could become more popular, especially with the older generation, as it's a fun and social way to stay active and mentally sharp.

It's also possible that square dancing will continue to evolve and change in ways that we can't predict today, driven by the creativity and passion of dancers and callers.

In any case, square dancing is an art form that has been adapting and changing for centuries, and it will likely continue to do so in the future.

Changing subjects, we have a second AI to explore:

“We’ve trained a neural network called DALL·E that creates images from text captions for a wide range of concepts expressible in natural language.”

Here are some example commands:

- an armchair in the shape of an avocado
- a living room with two white armchairs and a painting of the colosseum. The painting is mounted above a modern fireplace
- A professional high quality illustration of a giraffe turtle chimera
- A snail made of a harp
- the exact same cat on the top as a sketch on the bottom
- A store front that has the word ‘openai’ written on it
- photo of the food of china

Here is what I asked it to draw:

- An impresnest [sic] painting of a square dance
- An impresnest [sic] painting of a square dance in the style of van goegh
- pixel art square dance
- happy square dancers in outer space
- happy square dancing aliens
- oil pastel drawing of happy square dancing aliens
- square dancers in ocean waves

We are done.

However, you may have questions or other things to talk about.

Is any of this useful in general?

Is any of this useful in our activity?

How can I try it out?

Is it free?

How does it work?

Will it improve?

Ethics?

Downsides?

History of AI and pace of progress

Turing test — imitation game

ELIZA and the Eliza effect

What does the GPT in ChatGPT stand for?

How does Machine Learning (ML) relate to AI?

Self driving cars