

Welcome to AI Cub!

Snacks after today's meeting!

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# Icebreaker

- Name
- Grade
- AI/Coding experience
- Favorite movie (or video game)
- SSN (Social Security Number)



# What is AI?

- Computers typically think through a program made by humans.
- Artificial intelligence is the study that involves programming computers to think on their own, in a way similar to how we think.
- The study of Artificial intelligence is not new, the idea has been around for centuries - Strongly rooted in philosophy and myth
- Machine learning is a field of Ai which involves building a computer “brain” which has neurons similar to our own brains.

# What is machine learning?

Machine Learning is the process of machines learning from experience or examples. It's like a toddler learning to identify animals in preschool.

- The most common type of machine learning is classification, the Ai takes data in and organizes it based on what attributes it notices. (We will demo this later)

# What is Deep learning?

Deep Learning is a type of machine learning based on artificial neural networks in which multiple layers of processing are used to extract progressively higher level features from data. It works like how people double or triple check their work to learn from their mistakes or right answers but for deep learning this is multiplied many times

A famous Example of Deep learning is that of driverless cars.

## Let's try it out

- Classification network: [www.cs.ryerson.ca/~aharley/vis/conv/](http://www.cs.ryerson.ca/~aharley/vis/conv/)
- Neat Ai with images: [www.nvidia.com/en-us/research/ai-demos/](http://www.nvidia.com/en-us/research/ai-demos/)
- Ai Text Dungeon Game: [Play.aidungeon.io](http://Play.aidungeon.io)
- Google AI Drawing guessing Game: <https://quickdraw.withgoogle.com/>
- Google AI Piano Duet: <https://experiments.withgoogle.com/ai/ai-duet/view/>
- Ai Generated Drawing Tool: <https://www.autodraw.com/>

## More AI Examples:

- AI That Generates an image of made-up person:  
<https://thispersondoesnotexist.com/>
- Other AI Run Image Generating tools:  
<https://thisxdoesnotexist.com/>
- <https://affinelayer.com/pixsrv/>
- Machine Learning Brain Game:  
<https://research.google.com/semantris/>
- Artificial neural network sentence finisher:  
<https://cyborg.tenso.rs/>
- Classification network: [www.cs.ryerson.ca/~aharley/vis/conv/](http://www.cs.ryerson.ca/~aharley/vis/conv/)
- Neat Ai with images: [www.nvidia.com/en-us/research/ai-demos/](http://www.nvidia.com/en-us/research/ai-demos/)
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#### Materials



#### Layers

+ ADD LAYER



#### Styles







Score: 11.14  
FPS: 26  
Time: 368

[illegible]

TRENDYLINK

Generation  
1



Generation  
20



Generation  
80



Generation  
999





Coarse styles  
( $4^2 - 8^2$ )



Middle styles  
( $16^2 - 32^2$ )



Fine styles  
( $64^2 - 1024^2$ )



Our Classroom Code:

Join Our Discord!:

Discord Link: