

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green. They are positioned diagonally, with the blue one partially covering the green one.

# Artificial Intelligence

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# Definition of Artificial Intelligence



Artificial Intelligence is “the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages” as defined by the Oxford English Dictionary.

Artificial Intelligence works towards eliminating the requirement of humans in performing tasks that would typically need them. In theory, if artificial intelligence has developed enough it can perform any task that a human could.



# Different Disciplines of Artificial Intelligence

Machine Learning - computer programs that become more accurate over time through experience. Possible because of how fast computers solve problems compared to humans.

Cognitive Computing - the development of computer systems by mimicking how human brains deal with complex tasks allowing them to learn to do the same.

Computer Vision - analyzing the content of an image through pattern recognition and constant processing of image data.



# Different Disciplines of Artificial Intelligence Continued

Deep Learning- the processing of large amounts of data through machine learning to learn and improve over time. Uses positive and negative reinforcement to help improve accuracy.

Natural Language Processing- the ability for computers to understand human language either written or spoken.

Neural Networks- a process used by computers to analyze large sets of data through pattern recognition.

Note: None of the different disciplines are mutually exclusive of each other.



# Applications of Artificial Intelligence

Since Artificial Intelligence is theory that works towards having computers complete the tasks that a human could complete, in theory, the application of Artificial Intelligence has limitless possibilities because humans themselves have limitless possibilities for what they can do.

Artificial Intelligence has been implemented in many of our everyday lives where it works to help humans such as in smartphone apps or navigation systems, but there are many other places where it can be applied such as factories or farms where robots with Artificial Intelligence can be used to perform the manual labor that humans would typically perform.

# Targeted Advertising



Targeted Advertising is advertising of products that is specified to the tastes of specific user through the use of AI.

Targeted Advertising works through the tracking of a user's digital footprint, which is the sum of the user's searches, interactions, and communications on the internet. By looking at the user's digital footprint, AI is able to predict the wants and needs of the user.

One of the most common uses of Targeted Advertising is the YouTube recommended videos which are videos suggested by YouTube based on your search and watch history.

# Autonomous Cars



Autonomous Cars are cars that use tools to sense their environment and AI to drive the car with little to no human interaction.

Autonomous Cars use a wide array of sensory tools to perceive their surroundings such as thermographic cameras, radars, lidars, GPS, and odometers.

After obtaining all the sensory data through tools, the AI systems of the car analyze the data to plot a course, know when to stop, go, and how fast to drive



# Arguments Against Artificial Intelligence

- Artificial Intelligence can replace humans for cheap labor which can cost jobs for a lot of workers.
- If Artificial Intelligence develops to the point where it can gain sentience it can cause problems for humans if we were to come into conflict with them as a lot of our technology relies on Artificial Intelligence to some extent.
- Artificial Intelligence may cause humans to become overly reliant on them leading to a decline in human development as a whole.



# Conclusion



Artificial Intelligence is a computer theory with nearly limitless possibilities, but if not handled correctly could instead problems for humans such as replacing a portion of our labor force . That is why we should accurately plan how we develop Artificial Intelligence to allow everyone to become accustomed to them one step at a time. We shouldn't ignore the worries caused by Artificial Intelligence, but we also shouldn't stop development of it because we were to scared to innovate.



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