# Data Science vs Artificial Intelligence

Similarities

- According to the international university of applied sciences, Artificial intelligence involves the development of computer algorithms that can analyze, understand, and interpret complex data
    - Analyzing and interpreting complex data is what we did in data science
- Uses common tools such as python
- Ai's goal is to imitate humans
    - The way that it goes about it is by interpreting and analyzing the data fed into it

Differences

- Data science is an umbrella term for many different things but AI is a field within data science
- AI uses many aspects of engineering and computer science not just data science

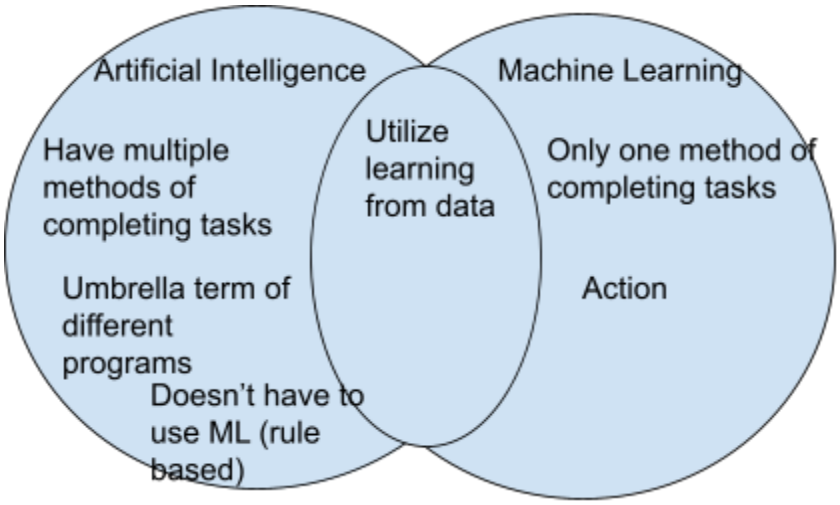
Artificial Intelligence

- Software designed to imitate human intelligence

# Machine learning vs Artificial Intelligence

Differences:

- ML is a subset of AI
    - Rule based learning (decision trees)
- ML is an action artificial intelligence can do



# Machine learning vs Data Science

Similarities

- Finding patterns in unstructured and unstructured data
- Use algorithms to analyze data
- Solve some type of problem using data

Differences

- Fundamentally different definitions
    - Data science: Data science is an interdisciplinary academic field that uses statistics, scientific computing, scientific methods, processes, algorithms and systems to extract or extrapolate knowledge and insights from potentially noisy, structured, or unstructured data.
    - Machine Learning: the use and development of computer systems that are able to learn and adapt without following explicit instructions, by using algorithms and statistical models to analyze and draw inferences from patterns in data.

Data Science

- Interpreting and analyzing complex data in order to solve some problem

Machine Learning

- Computer algorithms which can learn from patterns within data to solve specific problems

Artificial Intelligence

- Umbrella term of computer programs in which the program attempts to imitate some form of human behavior whether it be using a decision tree, machine learning or some other algorithm