

## What you will learn

We will learn about-

- Most important Machine Learning Algorithms- some of them are really important for large scale AI
- Important tips and tricks for making Machine Learning Algorithms performs well
- Implement Machine Learning Algorithms and see how they works

## Why Machine Learning uses so widely today?

- Machine Learning had grown up as a sub-field of AI
- We wanted to build intelligent machines

## Build Machine Intelligent by Traditional Programming approach

To make intelligent machines we can try traditional programming- even for few basic things we can make machine intelligence by programming. For example- Finding the shortest path from A to B like GPS

## Build Machine intelligent - allowing the machine to learn by doing by itself

But for the most part, we just don't know how to write explicit program to make the machine intelligent- such as-

- >. Perform web search
- >. Recognize humans speech
- >. Diagnose diseases from X-Ray
- >. Build a self-driving car

The only way to do these things are - allow the machine learn to do it by itself

## Motivation of Learning about Machine Learning

- We can great fun to implement machine intelligence to different exciting applications of different industries

- We are dreaming that someday we will be able to use AI in general purpose like humans which is known as **Artificial General Intelligence (AGI)**- Although it is overhyped now but some day we will be able to reach there

Most of the AI researchers believe that the best way to get closer towards that goal is by using learning algorithms

- According to McKinsey AI and Machine learning is estimated to create an additional 13 trillion US dollars of value annually by 2030

- Machine learning creating a huge value in software industry but yet it has opportunity to create more values outside the software industry like- retail, travels, transportation, materials manufacturing's etc.

- Day the demand of Machine learning skills are increasing rapidly- that's why this is such a great time to learn about Machine learning

- To find Machine Learning applications exciting- stick with learning- once you are become expert in Machine Learning- your skills will definitely become worthy and will give you the opportunity to generate more and more income

## Learning Style

- Start Pomodoro for 25 minutes
- Read and during read take notes
- Imagine and relate with real world metaphor what you are reading
- After reading recall whole reading without seeing the guide
- Practice spaced repetition to store the reading in long term memory