Chapter 1 - Introduction

- What is
  - AI
  - Machine Learning
  - Deep Learning
  - Shallow Learning

Amazon and Google provide AI cloud services

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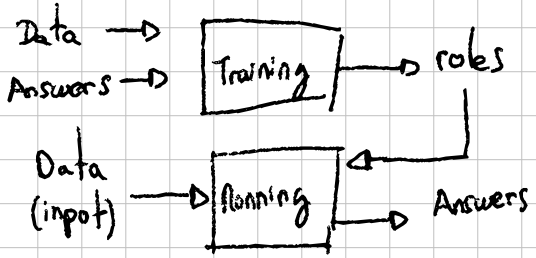
Chapter 2 - Applied vs Generalized AI

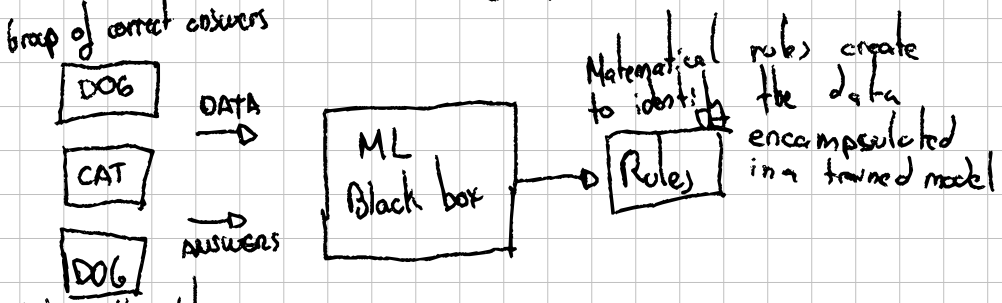
Chapter 1 - Machine Learning & AI

- **AI - Artificial Intelligence**
  - Mimic complex cognitive actions like identify an image or play a chest game without explicit rules
  - Ability to learn

- **Machine Learning**



We provide examples so the "AI" can identify patterns in the training phase



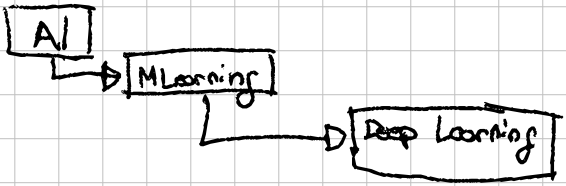
Labeling the data

"ML Black box" - training scenario with answers for data as examples

Why machine learning?

- Ability to learn from data without the need of programmed pre-set rules
- Ability to adopt the knowledge

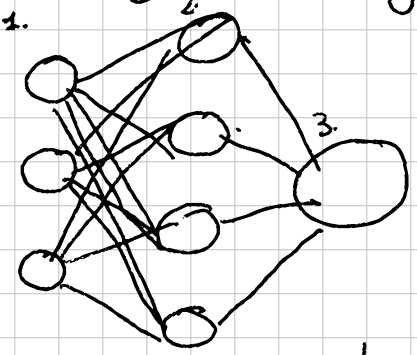
Thanks to the previous factors machine learning is now the most popular and succesful subfield of AI



Reserved Space for extras

ML Training Process & DEEP LEARNING

Knowledge in Layers



1. Input Layer
2. Hidden Layers
3. Output layers

* Layer: a layer is a data transformation phase

Input ⇒ (x levels of Layers) ⇒ Output

→ **Shallow Learning**

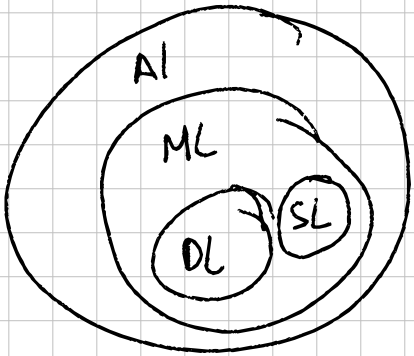
We call Shallow learning when we have only a few levels of layers. This can be more than enought for some tasks and use cases.

→ **Deep Learning**

More layer more complex tasks. This type of layers are also called "Neural Networks".

DEEP LEARNING

- Require more complex algorithms and computing resources.
- Amazon and google provide public AI cloud services



Perform complex intellectual tasks

Machines that can learn

Chapter 2 - Applied vs Generalized AI