Machine learning, last decade success

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Abstract—This electronic document permits me to synthesis the second course of data mining.

I. INTRODUCTION

This document explains what happened in the second course of Data Mining. It will be useful that you don't have to do Amadeus lab.

II. WHAT IS ARTIFICIAL INTELLIGENCE

From 1943 to 1998, artificial intelligence has growth.

- 1943 : first neutron
- 1950 : neural network machine
- 1975 : neurocognition
- 1983 : decision tree
- 1995 : SVM
- 1998 : deep learning

Actually, we don't know how exactly the human learn. The memory process is weird.

Strong artificial intelligence: it is like terminator. We are in century of this. For example, the shortest path algorithm.

Weak artificial intelligence: solving some problem of a certain class, it is actually what we are doing. For example, the alpha go (has been solved).

III. WHAT IS THE DIFFERENCE BETWEEN DATA MINING AND MACHINE LEARNING

Machine learning is one solution from Data Mining problem.

IV. WHAT IS THE DIFFERENCE BETWEEN MACHINE LEARNING AND STATISTICS

In statistics, made the assumptions of model permits us to found the answer. We will use clustering with three dimension. It will be modeling as a space.

In machine learning, we can choose a solution in a set of different solution.

V. Model

We have got some group of model:

- Clustering; find the number of cluster,
- Tree: iterative process but we don't know when to stop,
- Random forest : used in the Kinect for XBox,
- Deep Learning; it is not a neuron in Biology. It is a simpliest neuron.

VI. CONCLUSIONS ACKNOWLEDGMENT

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REFERENCES

[1] https://moodle.polytech.unice.fr/course/view.php?id=28

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