GUIDE TO <u>UNIT 1</u> (INTRODUCTION)

COURSE: MACHINE LEARNING I

MASTER IN BIG DATA ANALYTICS

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- In this lecture, the Machine Learning subject is introduced by using a classification task example, where sky objects have to be classified, that illustrates the main processes that must be followed in other classification tasks. Also, some application examples are used to illustrate the possible domains of application of Machine Learning.

- Then, three main concepts are introduced:

    - What can be done (tasks)

    - What kind of models can be learned to solve those tasks

    - Each type of model can be genereted by several different algorithms

- Finally, each kind of task is illustrated by giving an example, showing what the input data looks like and how the obtained models can be interpreted.

Associated material

This introduction involves both a theory presentation and a tutorial to the computer language that will be used for the assignments. Slides for the Python tutorial are available. Also, a simple assignment for practicing Pyrhon is proposed. Although the main aim of the assignment is a gentle introduction to Python, some Machine Learning ideas are also presented (feature extraction in text mining).