Project in artificial intelligenceTO: Prof. Shaul Markovitch

A picture containing light, sitting, green, blue

Description automatically generated

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# Project DESCRIPTION

Project goal is to implement four machine-learning algorithms and test their performance on four different datasets.

Algorithms implemented in the project are:

* **Decision Tree** – Parameters: m1, minimum number of samples in a leaf
* **Stochastic Decision Tree** – Parameters: m2, same as normal Decision Tree, the difference is the way we choose the next feature to split and internal node.
* **K-Nearest Neighbor** – Parameters: K number of neighbor to vote
* **Stochastic K-Nearest Neighbor** – Parameters: K, same as the normal KNN, the difference is in the decision phase, we pick K nearest neighbor **randomly** from the nearest 2\*k neighbors.