

task_10.2

Machine Learning (WiSe 2025/2026)

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Assignment 10 Task 2

Algorithm	Task T	Experience E	Performance Measure P	Solvable Task
Naive Bayes	Classification	Prior and Posterior Probabilities	Calculated Probability	Weather a patient really has cancer or not
Decision Trees	Classification and Regression	Already processed instances or preceeding branches/nodes	Entropy, Gini Coefficient etc.	Classification of loans as risky or not
Nural Networks (Perceptron)	Classification and Regression	Recurrent NN, using memory of past inputs	SSE or MSE	Image recognition
K Nearest Neighbour	Classification and Regression	Neighbouring cases/instances	Distances measures like Manhattan, Eucliediean etc.	Email filtering based on email content
K Means Clustering	Classification	Instances in a cluster or close to the centroid	SSE or MSE	Grouping similar data points