

MACHINE LEARNING – WRITTEN ASSIGNMENT 4

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1. (a) The decision boundaries can be found below.
(b) It appears that only decision trees and 1-nearest neighbour classify all data points correctly all data points, but it also appears that they are prone to overfitting. An idea to highly increase accuracy is to run all algorithms on the same dataset, and, with a given data point belonging to a test set, counting to which class it belongs to according to all three algorithms. If, say, all 4 algorithms indicate that the point should be a positive example, then it is highly likely that it is, on the other hand, being aware of the fact that some classifiers do not categorise a given point of a test set as a positive example should require a more careful consideration.
- 2.

