

Student:

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Software version:

Python 3.8.5

Operating System:

Windows 10

Algorithm used for prediction:

SVM using default settings and the SVC classifier accomplished an F1 measure of 0.968 on the learning set and was therefore chosen for the actual prediction.

Processing applied to the data before training/predicting:

The learning data was split into the input features (everything except of the 'ID' and 'class' column) and the target feature (the 'class' column).

Then the learning data was split into 2/3 trainig set and 1/3 test set. With this split 4 different algorithms with different parameters were trained:

- k-NN (1-NN)
- k-NN (2-NN)
- k-NN (3-NN)
- Decision Tree (max features: None)
- Decision Tree (max features: sqrt)
- Decision Tree (max features: log2)
- SVM (SVC classifier)
- Random Forests (num trees: 10, max features: sqrt)
- Random Forests (num trees: 10, max features: log2)
- Random Forests (num trees: 100, max features: sqrt)
- Random Forests (num trees: 100, max features: log2)

The best performing algorithm on this test split was than retrained with the whole learning data and used to create the prediction on the test set.