Programming Project

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Contents

Task Description - To Remove before Submission heheh

- 4 Datasets (2x from ex0, 2x from Kaggle TU Wien Informatics)

- Run 3 different Classifiers on all four datasets ($4 \cdot 3 = 12$ classifiers, yes integer arithmetic very hard)

- Choice of classifiers:

    1. Use classifiers from different paradigms. e.g.: dont use only tre based algorithms

    2. Use classifiers from already covered, not yet covered or not at all covered in the ML lecture

- Different Parameter Settings (Several results per classifier and dataset, not only random/best)

- Evaluate and analyze performance

- Make valid comparisons, e.g. across datasets, across classifiers

- How do results change when preprocessing strategies change? (explain impact, mainly scaling)

- Compare Holdout to Cross-Validation

- find multiple means of performance measures for classifiers

- Argue on choice of Performance Measures

- Argue on measures we took to ensure comparability of classifier performance

1 Classifiers and Performance Metrics

Classifiers

In task 1 of the machine learning course, we had to implement 3 different classification algorithms from 3 different classification paradigms:

- Bayesian Network Algorithm

- MLP Network Algorithm

- k-NN

2   Generic Chapter Title 2

3 Generic Chapter Title 3