

Optimal meta-feature subsets for a single classifier

1. For NaiveBayes:

- NumberOfFeatures;
- MeanNormalizedFeatureEntropy;
- MaxMutualInformation;
- EquivalentNumberOfFeatures;
- NoiseSignalRatio;
- PrunedTreeMeanBranch;
- PrunedTreeMinAttr;
- PrunedTreeMinBranch;
- PrunedTreeMinClass;
- UnprunedTreeDevAttr;
- UnprunedTreeLeavesNumber;
- UnprunedTreeMaxBranch;
- UnprunedTreeWidth;
- MinSqrtBestK;
- FullBestK;
- StdDevHalfPerceptronWeightSum;
- FullPerceptronWeightSum.

2. For C4.5:

- NumberOfFeatures;
- NumberOfClasses;
- DataSetDimensionality;
- MeanLinearCorrelationCoefficient;
- MeanKurtosis;
- MeanNormalizedFeatureEntropy;
- NoiseSignalRatio;
- MeanCoefficientOfVariation;
- PrunedTreeDevBranch;

- PrunedTreeDevLevel;
- PrunedTreeLeavesNumber;
- PrunedTreeMaxAttr;
- PrunedTreeMaxBranch;
- PrunedTreeMaxLevel;
- PrunedTreeMinAttr;
- PrunedTreeMinBranch;
- PrunedTreeNodeNumber;
- PrunedTreeWidth;
- PrunedTreeMaxClass;
- PrunedTreeMinClass;
- PrunedTreeMeanClass;
- UnprunedTreeDevLevel;
- UnprunedTreeMaxAttr;
- UnprunedTreeMeanLevel;
- UnprunedTreeWidth;
- UnprunedTreeDevClass;
- UnprunedTreeMaxClass;
- UnprunedTreeMinClass;
- MaxHalfBestK;
- MaxSqrtBestK;
- MaxOneTenthBestK;
- MinSqrtBestK;
- StdDevHalfBestK;
- FullBestK;
- MaxHalfPerceptronWeightSum;
- MaxSqrtPerceptronWeightSum;
- MaxOneTenthPerceptronWeightSum;
- MinSqrtPerceptronWeightSum;

- MinOneTenthPerceptronWeightSum;
- MeanHalfPerceptronWeightSum;
- MeanOneTenthPerceptronWeightSum;
- StdDevHalfPerceptronWeightSum;
- StdDevSqrtPerceptronWeightSum;
- FullPerceptronWeightSum.

3. For PART:

- NumberOfFeatures;
- PrunedTreeWidth;
- UnprunedTreeMaxBranch;
- MinHalfBestK;
- MinSqrtPerceptronWeightSum;
- MeanHalfPerceptronWeightSum.

4. For BayesNet:

- NumberOfFeatures;
- DataSetDimensionality;
- MeanLinearCorrelationCoefficient;
- MeanSkewness;
- MaxMutualInformation;
- MeanStandardDeviation;
- MeanCoefficientOfVariation;
- PrunedTreeDevAttr;
- PrunedTreeDevLevel;
- PrunedTreeMaxLevel;
- UnprunedTreeMaxLevel;
- UnprunedTreeMeanAttr;
- UnprunedTreeMeanBranch;
- UnprunedTreeMeanClass;
- MaxHalfPerceptronWeightSum;

- MeanHalfPerceptronWeightSum;
- MeanSqrtPerceptronWeightSum;
- StdDevOneTenthPerceptronWeightSum;
- FullPerceptronWeightSum.

5. For IB3:

- NormalizedClassEntropy;
- MaxMutualInformation;
- NoiseSignalRatio;
- PrunedTreeDevLevel;
- PrunedTreeHeight;
- PrunedTreeMaxAttr;
- PrunedTreeMaxBranch;
- PrunedTreeMeanAttr;
- PrunedTreeMinBranch;
- PrunedTreeNodeNumber;
- PrunedTreeMeanClass;
- UnprunedTreeMaxLevel;
- UnprunedTreeMeanAttr;
- UnprunedTreeMeanLevel;
- UnprunedTreeNodeNumber;
- UnprunedTreeDevClass;
- UnprunedTreeMinClass;
- MaxOneTenthBestK;
- MinOneTenthBestK;
- FullBestK;
- MaxHalfPerceptronWeightSum;
- MaxSqrtPerceptronWeightSum;
- MaxOneTenthPerceptronWeightSum;
- MinHalfPerceptronWeightSum;

- MeanHalfPerceptronWeightSum;
- MeanSqrtPerceptronWeightSum;
- StdDevOneTenthPerceptronWeightSum.