Algorithm Class

2017/9/27

Tasks

- Cloud Web
 - Use the given online system to get weak labels
 - Split the documents into Related or Not Related

Regression Algorithms

Regression Algorithms

Ordinary Least Squares Regression (OLSR)

Linear Regression

Logistic Regression

Stepwise Regression

Multivariate Adaptive Regression Splines (MARS)

Locally Estimated Scatterplot Smoothing (LOESS)

Regression Algs

- Group: total 6 persons; 1 person / algorithm
- Content
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 - Classification

Instance-based Algorithms

Instance-based Algorithms

k-Nearest Neighbor (kNN)

Learning Vector Quantization (LVQ)

Self-Organizing Map (SOM)

Locally Weighted Learning (LWL)

Instance-based Algs

- Group: total 4 persons; 1 person / algorithm
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Regularization Algorithms

Regularization Algorithms

Ridge Regression

Least Absolute Shrinkage and Selection Operator (LASSO)

Elastic Net

Least-Angle Regression (LARS)

Regularization Algs

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Decision Tree Algorithms

Decision Tree Algorithms

Classification and Regression Tree (CART)

Iterative Dichotomiser 3 (ID3)

C4.5 and C5.0 (different versions of a powerful approach)

Chi-squared Automatic Interaction Detection (CHAID)

Decision Stump

M5

Conditional Decision Trees

Decision Tree Algs

- Group: total 7 persons; 1 person / algorithm
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Bayesian Algorithms

Bayesian Algorithms

Naive Bayes

Gaussian Naive Bayes

Multinomial Naive Bayes

Averaged One-Dependence Estimators (AODE)

Bayesian Belief Network (BBN)

Bayesian Network (BN)

Bayesian Algs

- Group: total 7 persons; 1 person / algorithm; exception: 2 persons / BN
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Clustering Algorithms



Clustering Algs

- Group: total 4 persons; 1 person / algorithm;
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Association Rule Learning Algorithms

Association Rule Learning Algorithms **Apriori algorithm**

Eclat algorithm

Association Rules Learning Algs

- Group: total 2 persons; 1 person / algorithm
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