DSBA/HCIP 6162 Knowledge Discovery in Databases

Course Syllabus

1) Data preprocessing
2) Association and classification rules
3) Decision trees
4) Data semantics
5) Granular computing
6) Data discretization
7) Data reduction (preserving knowledge hidden in data)
8) Other data mining methods: SVM, Random Forest, NN Classifiers,...
9) Mining incomplete and unbalanced data
10) Data actionability (action rules and meta-actions)
11) Null value imputation and Chase
12) Evaluation methods (confusion matrix, ...)
13) Distributed data mining
14) Mining big data
15) Cluster analysis
16) Data security/sanitization
17) Applications in health (Clinical pathways analysis, risk prediction, personalized healthcare)
18) Applications in business (NPS score, customer churn, ...)
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