

RESEARCH ARTICLE



A Comparative Study on Performance Evaluation of Eager versus Lazy Learning Methods

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Abstract: - Classification is one of the fundamental tasks in data mining and has also been studied extensively in statistics, machine learning, neural networks and expert systems over decades. Naïve Bayes, k-nearest, and decision tree are the most commonly known classification algorithms ever used in different researches. In this study, the performance evaluation of eager (naïve Bayes, ADTree) and lazy (IBk, KStar) classification algorithms are experimented. Our findings show that based on the evaluation metrics precision, recall, F-measure and accuracy, eager learners are slow in training but faster at classification than lazy classification algorithms because they constructs a generalization model before receiving any new tuples to classify. Moreover, based on our investigation eager learners outperform the lazy learners in their accuracy.

Keywords: Classification; Eager learner; Lazy learner; ADTree; Naïve Bayes