

The goal of the diploma thesis is to design, implement and evaluate classifiers for automatic classification of semantic patterns of English verbs according to a pattern lexicon that draws on the Corpus Pattern Analysis. We use a pilot collection of 30 sample English verbs as training and test data sets. We employ standard methods of machine learning. In our experiments we use decision trees, k-nearest neighbours (kNN), support vector machines (SVM) and Adaboost algorithms. Among other things we concentrate on feature design and selection. We experiment with both morpho-syntactic and semantic features. Our results show that the morpho-syntactic features are the most important for statistically-driven semantic disambiguation. Nevertheless, for some verbs the use of semantic features plays an important role.