

Neural networks represent a promising approach to problems, which exact algorithmic solution is unknown or not efficient enough. Morphological tagging is one of such tasks in the area of computational linguistics. We have tried to use a backpropagation neural network in several types of experiments. When determining the correct tag on the basis of reliable context, we have learned that the neural tag is basically capable to handle the problem, although the achieved tagging precision (89,22%) did not reach that of statistical methods (93,47%). We also managed to determine appropriate network and context parameters that we have used in the next experiments. The attempt to determine the correct tag on the basis of beforehand statistically determined tags brought a slight decrease of tagging precision (88,71%). Finally, the experiment, which goal was to vote from the outputs of two statistical taggers, showed higher tagging precision (93,56%) than any of these methods (92,74%, 92,58%). It is therefore the overall best result on the given training data set (Prague Dependency Treebank). Hence, it is recommended to test the method by training it on a larger training set (Czech Corpus).