Improving accuracy of intention-based response classification using decision tree.

ABSTRACT

This study focused on improving the dialogue act classification to classify a user utterance into a response class using a decision tree approach. Decision tree classifier is tested on 64 mixed-initiative, transaction dialogue corpus in theater domain. The result from the comparative experiment show that decision tree able to achieve 81.95% recognition accuracy in classification better than the 73.9% obtained using Bayesian networks and 71.3% achieved by using Maximum likelihood estimation. This result showed that the performance of decision tree as classifier is well suited for these tasks.