ABSTRACT

Semantic role labeling is a process of giving role label towards argument from a sentence based on it's predicate. It could be done manually by human or by creating a system of program that will learn how to do it for the human. But it will take a lot of time, resource, and money either done by human or machine especially if the amount of data is huge. What if the unlabeled data come from different domain to the labeled data. One solution is to build SRL system that could process the data from another domain. But a better solution is to build domain adaptation system. Domain adaptation allow labeling process using two datasets from different domain. Based on research by Jiand and Zhai, using instance weighting in domain adaptation could improve the performance of domain adaptation. The research use instance pruning algorithm that will remove misleading instances from source domain. Feature that used in semantic argument classification are baseline feature and additional feature. The result from this experiment shows performance of instance pruning in domain adaptation. Removing misleading instances base on the value of argument attribute. If instances from source domain have argument value that target domain didn't have it's considered as noise and removed from source domain. The f1 score from the result of testing with instance pruning is 0.78.

Keywords: Semantic Role Labeling, Domain Adaptation, Classification Instance Weighting, Instance Pruning