Abstract

For every language, preposition checker is essential component of many of Office Automation System and Machine Translation System. In addition, Myanmar prepositions play an important role of Myanmar sentences because the percentages of preposition errors are the highest in Myanmar sentence. This paper describes a Transformation Based Learning (TBL) Algorithm to the automatic correction of preposition errors in Myanmar Language. TBL uses rule templates to identify error-correcting patterns. A critical requirement in TBL is the availability of a problem domain expert to build these rule templates. In this work, Decision tree (DT) is used to automatically generate TBL rule templates. Myanmar Preposition Checking System (MPCS) which can handle missing preposition errors, misused preposition errors and unwanted preposition errors. As a Resource, a Myanmar Text Corpus is created and Myanmar3 Unicode is applied in this system. This proposed system improves the quality of corrections for Myanmar prepositions errors in students and non-native writers. It also provides the quality of machine translation system and many NLP applications.

References

A. D. Matthieu Hermet and S. Szpakowicz, Using the web as a linguistic resource to automatically correct lexico-syntactic errors, in LREC'08, Marrakech, Morocco, May 2008.


Lidia Mangu and Eric Brill, Automatic Rule Acquisition for Spelling Correction


Myanmar Grammar, Department of Myanmar Language commission, Ministry of education, Union of Myanmar June 2005.


Index Terms

Computer Science

Information Sciences
Keywords

Myanmar Prepositions Checking System (MPCS)  Transformation based learning
(TBL) Algorithm                          Decision Tree
(DT)