

An Improved Semantic Role Labeling for Myanmar Text

Zin Mar Kyu

zinmarkyu.ucsm@gmail.com

University of Computer Studies, Mandalay, UCSM

Naw Lay Wah

nawnaw09@gmail.com

University of Computer Studies, Mandalay, UCSM

The semantic role labeling plays a key role to extract semantic information from language text for the purpose of information retrieval, text summarization, plagiarism test, etc. This paper presents two main parts: MynNet and semantic role labeling. MynNet, which is a FrameNet for Myanmar language is proposed to extract the semantic relations and various kinds of lexical meanings of each individual word. Moreover, it is exploited to know how each of them depends on the others in what kind of semantic ways. The major job of semantic role labeling is to parse the arguments of a sentence from small words into combination of text chunks in the form of suitable arguments to be able to express the semantic meaning of that sentence. In labeling, different forms of segmented text phrases are considered, and it is affordable to categorize different relationship types of segmented Myanmar Text phrases such as core, non-core, etc. The proposed system is trained on roughly 70,000 words with 3000 hand-annotated semantic information for general domain. This system is tested with untrained domains with different kinds of sentences in order to test efficiency of our labeling ability for semantic roles. According to the experiment results, we achieve better results than other semantic role labelers of Myanmar Text.