AN AUTOMATED SYSTEM FOR THE TRANSLATION OF ENGLISH ANALYTICAL CAUSATIVE CONSTRUCTIONS INTO MALAYALAM

Bijimol TK[1], John T. Abraham[2] & Jyothi Ratnam D[3]

[1]Research Scholar, Bharathiar University, Coimbatore, Tamil Nadu, India

[2]Assistant Professor, Bharath Math College Trikkakkara, Cochin, Kerala, India

[3]Research Scholar, Amrita Vishwa VidyaPeetham, Coimbatore, Tamil Nadu, India

ABSTRACT

Machine Translation (MT) is a branch of Natural Language Processing (NLP). Machine translation industry tries to achieve translation excellence. Many translations systems were developed by various agencies for English-Indian language translations. The linguistic features of English and Indian languages are the main hindrance, which affects the quality of various MT systems. The on-line MT providers like Google translator, Bing translator and TDIL developed their system by using the techniques like Statistical MT, Neural MT, and other modern methods. It had been observed that the output of all these systems is not up to the mark, it is simply because of the linguistic phenomena of the natural languages. Here we discuss the linguistic problems related to the translation of the English causative sentence into Malayalam. Then we proposed a Rule-based system to handle the causative sentence in both languages. Malayalam is a highly agglutinative and morphologically rich language these linguistic specialties of Malayalam determine the quality of all kinds of MT systems. Moreover, the scarcity of Malayalam resources and lack of perfect NLP tools are the main obstacles for the development of English–Malayalam, and Malayalam to other Indian language MT systems.

KEYWORDS: *Natural Language Processing, Rule-Based Machine Translation System, Google NMT, Causative Verbs, Word Order Identification, Word Reordering, Impersonal/Interpersonal Causative Verb Identification*