

## Machine Translation For Regional Language

Priya Gour<sup>1</sup>, Shubham Yadav<sup>2</sup>, Paras Tank<sup>3</sup>, Abhishek Vishwakarma<sup>4</sup>.

<sup>1</sup>(Electronics, Slrtce/Mumbai University, India.)

<sup>2</sup>(Electronics, Slrtce/Mumbai University, India.)

<sup>3</sup>(Electronics, Slrtce/Mumbai University, India.)

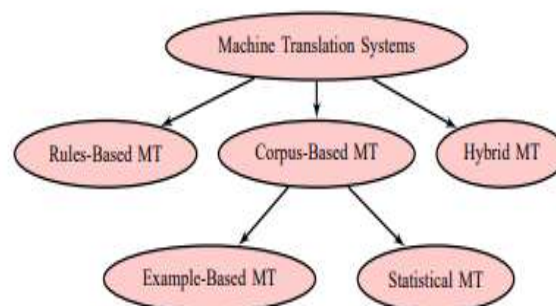
<sup>4</sup>(Electronics, Slrtce/Mumbai University, India.)

**Abstract:** The aim of the project is to reduce the communication gap between the one who is good in one language while the other one has some difficulties about the language. In this work, we provide our efforts to develop a rule-based translation system, which analyzes the translation and generate source language. Due to the wide gap (Hindi following SOV and SVO English word order) in order to find the two languages of words, re-ordering of the words is to be carried out. As a result of the above drawbacks of the approach outlined, we shifted statistical methods to develop a system. Natural Language Processing is a technique to minimize communication barrier amongst the humans. As each model has its pros and cons, we propose an approach where we try to capture the advantages of each system, thereby developing a better MT system. We then incorporate semantic information in phrase-based machine translation using monolingual corpus where the system learns semantically meaningful representations.

**Keywords:** MT, NLP

### I. Introduction

The machine has an area of linguistic translation between sentences or documents enables automatic translation to other languages. Past each approach are many approaches to solving the problems of MT has been suggested as having their pros and cons. The system combines the positive corresponding translation for each system to perform better than each individual system.



### II. Methods

**Rule-based approach:** Rule-Based Approach is used as a way to store and manipulate knowledge to interpret information in a useful way. They are often used in artificial intelligence applications and research.

**CORPUS based approach:** Corpus linguistics is the study of words that are used in day-to-day life. The text-corpus method is an approach that contains a set of abstract rules that correct a natural language from texts in that language, and represents how that language relates to other languages.

**Hybrid approach:** The hybrid approach combines all other methods and improved performance benefits obtained in both the previous mentioned approaches.

**Language barrier:** Top industry news articles translated and can be seen in the translation of documents in the judicial system. Hearings and documents in regional law court vernacular, when the case of the High Court which are performed in moves to English is the official language, which makes it an issue. Time suspended justice raised by human translators to translate all documents into local languages to English and weak judicial system.

#### Language ambiguity:

Vagueness in language is a problem that can be solved. Languages ambiguity found in:

□ **When textual ambiguity:** is understood in the two possible senses or forms of the same word is literal ambiguity.

**Examples like:**

- A) Read the "now".
- B) "now" flight.

Here the book "In the first statement the word" "feminine" second "action" kind of statement while working in the same word acts.

□ **homonym:** different meanings words with the same pronunciation.

**Examples like:**

- A) Two & Two.
- B) mat and mats
- C) and bee

□ **Metom:** something is a word, but used for a description of the meaning of a word.

**Examples like:**

- A) used in place of "hands", "Help"
- B) used in place of "tongue", "Language".

**Software Required:** Coding Can Be Done In Any Language But, Python Is Most Convenient And Easy As All The Required Libraries Are Available In It.

**Libraries:**

- 1 Nltk
- 2 Tensorflow
- 3 Spacy

### III. Conclusion

In this paper we have listed problems faced while we have been used to translate one language to another language rules. In addition, we have listed encountered during translation problems languages. Also, we will be developing solutions to problems faced by the same. This is an early stage just a language to translate the second language. Once it is successfully implemented, further more functions will be added to it.

### References

- [1]. M Chandhana fragrance, "Natural language processing future", IEEE optical imaging sensors and security (ICOSS) 2-3 July 2013, Coimbatore, India.
- [2]. Jayshree Nair, "an efficient machine translation system using hybrid system", IEEE Computing Communications and Informatics (ICACCI) 21-24 SEPTEMBER 2016 Jaipur, advances in India.
- [3]. MA Perez-Quinones, OI Pedila- Falto, K. McDevitt, "User automatic language Richard Tapia Celebration of translation" Diversity in Computing Conference interface, L9-20 to October 2005, the United States.
- [4]. Sheena Angra, Sachin Ahuja, "machine learning and its applications", Big Data analytics and International Conference on Computational Intelligence (ICBDAC), 23-25 March 2017, Chirala, India.
- [5]. M Aljlal, O. Frieder, and D. Grossman, "Arabic-English cross-language information retrieval on a machine translation approach", IEEE Computer Society, Proceedings of the International Conference on Information Technology: Coding and Computing, 2002.
- [6]. Lamiaa Mostafa, "Webpage Keyword Extraction Using Term Frequency", *International Journal of Computer Theory and Engineering*, 1 February 2013.
- [7]. A. Burchardt, C. Tschewinka, A. Eleftherios, and H. Uszkoreit, "Machine Translation at Work in Computational Linguistics", *Studies in Computational Intelligence Vol. 458, pp 241-261, Springer, 2013.*
- [8]. F. Calefato et al., "Assessing the Impactor Real-Time Machine Translation on Requirements Meetings: A Replicated Experiment," *Proc. ACM-IEEE Int'l Symp. Empirical Software Engineering and Measurement (ESEM 12), ACM, 2012, pp. 251-260.*