Abstract

In the present work a model is proposed which deals with specifying the pattern for translating the English sentences into Hindi. Here a Vector Space based translation model has been proposed that transforms a Vector Space by graphical representation of text that addresses the issues of manual, automatic and adaptive strategies by incorporating the selection preferences for word argument positions. Vector Space Model (VSM) represents documents and queries usually as Vectors, Matrices or Tuples. The similarity of the Query Vector and Document Vector is represented as a scalar value. This model constructs a sentence graph for a given sentence and applies structural parsing on this sentence. The quality of a system is measured by considering its usefulness for typical users of the system. The recent development of related techniques stimulates new modeling and estimation methods that are beyond the scope of the traditional approaches. Keywords: Pattern Recognition, Vector Space Model, Mathematical Model.

References
- Alexandrescu A. and Kirchoff. K., (2007), Data-Driven Graph Construction for Semi-Supervised Graph-Based Learning in NLP. In HLT.
- Hoede, C., Syntax and semantics, (2004), A comparison of the structuralistic language theory of Ebeling with knowledge graph theory, Memorandum No. 1710, Faculty of Mathematical Sciences, University of twente, Enschede, The Netherlands, ISSN 0169- 2690.
- Dan Melamed, (2004), Statistical Machine Translation by Parsing, Proceedings of ACL.
- Jonathan Graehl and Kevin Knight, (2004), Training Tree Transducers, Proceedings of HLT-NAACL.
- Lin Dekang, (2004), A path-based transfer model for machine translation, Proceedings of
the 20th international conference on Computational Linguistics, Association for Computational Linguistics.


**Index Terms**

Computer Science  
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**Keywords**  
Pattern Recognition  
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