ABSTRACT

Natural language processing (NLP) is a field of computer science and linguistics concerned with the interactions between computers and human (natural) languages.In theory, natural language processing is a very attractive method of human-computer interaction. Natural language understanding is sometimes referred to as an AI (Artificial Intelligence) complete problem because it seems to require extensive knowledge about the outside world and the ability to manipulate it.

The objective of the project is to develop a Word Sense Disambiguation system (WSD). WSD is one of the basic tasks in Natural Language Processing. It has many applications in computational linguistics, including machine translation; information retrieval; text mining and speech processing.WSD is applied whenever a semantic understanding of text is needed.

WSD system takes a paragraph having the keyword as an input, tags the part of speech to each word in the given paragraph, trains the clue words and maps those words to corresponding meanings in word net dictionary (database). Finally depending on the meaning of the clue words the context based meaning of the keyword is generated.

This project eliminates ambiguities in the Cross Language Information Retrieval using dictionary based approach. It reduces the time needed to obtain results in a search engine by searching for the relevant data in the database based on the given context and gives the results accordingly to end user.