**ABSTRACT**

Natural language processing (NLP) as of late has received a ton of press for its computational portrayal and investigation of human language. It has a wide scope of utilization, including machine interpretation, email spam identification, information extraction, rundown, clinical, and question addressing, among others. Different algorithms corresponding to natural language processing are discussed in the paper. Differentiating between different algorithms and writing is future scope is mentioned in this paper. The article is partitioned into four areas, starting with a conversation of various degrees of NLP and parts of Natural Language Generation (NLG), then, at that point, continuing to the set of experiences and development of NLP, the best in class, and latest things and troubles.

**INTRODUCTION**

Natural Language Processing refers to the area of computational linguistic which combines human language with statistical data and deep learning models. It allows computers to process human language to the full of its extent, that is, understanding the human emotions and intent behind the words the speaker or the writer has said or written.

NLP does not treat text as just a mere sequence of symbols. It understands the thought process of the speaker and why such words are used in order. It digs a little deeper than just the surface. The human-computer interaction allows the development of real-world applications like automatic text summarization, sentiment analysis, topic extraction, named entity recognition, parts-of-speech tagging, relationship extraction, stemming, and more.

NLP manages computer programs that translate text from one language to another, respond to voice commands, and quickly summarize large amounts of text in real-time. It is also playing an increasingly important role in enterprise solutions that simplify business operations, improve employee productivity, and simplify critical business processes.