

## List Of Tasks In NLP:

Here is a list of NLP tasks in brief. Let us see:

- **Anaphora (linguistics)** is a relation between two linguistic elements, in which the interpretation of one (called an anaphor) is in some way determined by the interpretation of the other (called an antecedent).
- **Automated essay scoring** is used to classify a large set of textual entities into a small number of discrete categories, corresponding to the possible grades.
- **Automatic hyperlinking** is the process or software feature that produces auto links. Segments of the hypermedia are identified through a process of pattern matching.
- **Automatic summarization** is the process of shortening a set of data computationally, to create a subset (a summary) that represents the most important or relevant information within the original content.
- **The Constituent Likelihood Automatic Word-tagging System (CLAWS linguistics)** is a program that performs part-of-speech tagging.
- **Collocation extractions** are phrases or expressions containing multiple words, that are highly likely to co-occur.
- **Entity linking** is a tool that identifies meaningful substrings (called "spots") in an unstructured English text and links each of them to the unambiguous entity (an item in a knowledge base).
- **Google Neural Machine Translation** is a neural machine translation (NMT) system developed by Google, that uses an artificial neural network to increase fluency and accuracy in Google Translate
- **Language identification** is the process of identifying a language from a random spoken utterance.
- **Lemmatization** is used to reduce inflectional forms and sometimes derivationally related forms of a word to a common base form.
- **Linguistic empathy** in theoretical linguistics is the "point of view" in an anaphoric utterance by which a participant is bound with or in the event or state that he/she describes in that sentence.
- **Machine translation** is a process by which computer software translates text from one language to another without human involvement.
- **Mobile translation** is the process where a software application or an electronic device will be used for translation.
- **Name resolution (semantics and text extraction)** refers to the ability of text mining software to determine which actual person, actor, or object a particular use of a name refers to. It can also be referred to as entity resolution.
- **Named-entity recognition** involves the identification of key information in the text and classification into a set of predefined categories. An entity is basically the thing that is consistently talked about or referred to in the text.
- **Neural machine translation** is an approach to machine translation that uses an artificial neural network to predict the likelihood of a sequence of words, typically modeling entire sentences in a single integrated model.

- **Open information extraction** normally consists of a relation and a set of arguments. For instance, ("Dante", "passed away in" "Ravenna") is a proposition formed by the relation "passed away in" and the arguments "Dante" and "Ravenna". The first argument is usually referred to as the subject while the second is considered to be the object.
- **Part-of-speech tagging** is a process of converting a sentence to forms – a list of words, a list of tuples (where each tuple is having a form (word, tag)). The tag in this case is a part-of-speech tag and signifies whether the word is a noun, adjective, verb, and so on.
- **Phrase chunking** is a phase of natural language processing that separates and segments a sentence into its sub-constituents, such as nouns, verbs, and prepositional phrases, abbreviated as NP, VP, and PP, respectively.
- **Question answering** is a computer science discipline within the fields of information retrieval and natural language processing (NLP), which is concerned with building systems that automatically answer questions posed by humans in a natural language.
- **Relationship extraction** is a relationship extraction task that requires the detection and classification of semantic relationship mentions within a set of artifacts, typically from text or XML documents.
- **Resume parsing** analyses resume data and extract it into machine-readable output such as XML, JSON. A CV/resume parser helps automatically store, organize, and analyze resume data to find the best candidate.
- **Semantic parsing** is the task of converting a natural language utterance to a logical form: a machine-understandable representation of its meaning. Semantic parsing can thus be understood as extracting the precise meaning of an utterance.
- **Semantic role labeling** aims to model the predicate-argument structure of a sentence and is often described as answering "Who did what to whom". BIO notation is typically used for semantic role labeling.
- **Sentence boundary disambiguation** is the problem in natural language processing of deciding where sentences begin and end.
- **Shallow parsing** is the process of being able to get part of this information (parse tree).
- **Stemming** is the process of reducing a word to its word stem that affixes to suffixes and prefixes or to the roots of words known as a lemma. Stemming is important in natural language understanding (NLU) and natural language processing (NLP).
- **Terminology extraction** is the action of removing something. For example, when the dentist yanks out your rotten tooth, the extraction is complete! In addition to this wince-inducing meaning, noun extraction is the process of separating out something from a chemical mixture or compound.
- **Text segmentation** is the process of dividing the written text into meaningful units, such as words, sentences, or topics. The term applies both to mental processes used by humans when reading text, and to artificial processes implemented in computers, which are the subject of natural language processing.

- **Text simplification** is the task of reducing the complexity of the vocabulary and sentence structure of the text while retaining its original meaning, with the goal of improving readability and understanding.
- **Textual entailment** is the task of deciding, given two text fragments, whether the meaning of one text is entailed (can be inferred) from another text
- **Truecasing** is the problem in natural language processing (NLP) of determining the proper capitalization of words where such information is unavailable.
- **Tokenization** is a process of replacing the cardholder's sensitive information with a unique identifier or token that cannot be mathematically reversed, so the data are passed through the PayCEC payment gateway without the card details being exposed.

## References:

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