

# IDENTIFICATION OF CERTAIN EMOTIONS IN TEXT:

## NATURAL LANGUAGE PROCESSING

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## 1. OBJECTIVE

The aim of this project is to identify certain basic emotions present in a text with the help of a corpus, a parser and analyzer by annotating the given text.

## 2. INTRODUCTION

Our aim is to work on something which is part of our daily life but we never think of doing it. It is considering the emotions which are part of the text we hear or read. Here we want to develop a system that has the ability to analyse a text and identify some common possible emotions from it such as ANGER, HAPPINESS, FEAR, SADNESS, DISGUST and categorize the data on the basis of words and sentences used in it<sup>[1][2]</sup>.

Our system takes any given line of text as string of words where each word will be processed by passing them through the PCFG parser which gives us the different part of the speech. The rest of the current input is then worked on by an annotated corpus to search for the emotion related to the word we have in the input. This collected data is then analysed by using PLSA<sup>[2]</sup> (Probabilistic Latent Semantic Analysis) technique.

### 3. MOTIVATION

Emotions have been widely studied in psychology and behavior sciences, as they are an important element of human nature. They have also attracted the attention of researchers in computer science, especially in the field of human computer interaction, where studies have been carried out on facial expressions or on the recognition of emotions through a variety of sensors. In computational linguistics, the automatic detection of emotions in texts is becoming increasingly important from an applicative point of view.

Consider for example the tasks of opinion mining and market analysis, affective computing, or natural language interfaces such as e-learning environments or educational/edutainment games.

### 4. REFERENCES

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