

## Project Initial Commit:

Finding resources and research about the lexical ambiguity & NLP applications

### Questions to be asked:

- Is there any different approach for dealing lexical Ambiguity?
- How the words are exactly predicted in NLP applications?
- How can we improve the probability of word prediction?
- How can a Model be developed for this?

### work done so far:

- Initialized problem statement & started working on IEEE papers, completed working on Research Paper

### Current work in progress

Started gathering of information about different algorithms that can be applied on Corpora as Most

of the Research paper has implemented only  
word sense Disambiguation in different Context

future Course of Action

→ we have to gather information about an action  
that can be implemented

• understand & implement the algorithm on a large  
Corpora

## Literature Survey

Title

Limitations

using linear Mixed-effects  
Models to Resolve Ambig-  
-uity

It depends on Reading  
image if not Read  
then it differs in analysis  
the words where different  
are used instead of context  
word.

• Resolving Tensorflow lexical  
Ambiguity in Tensor Regression  
Models of learning.

• In this the Robust  
-sion Model Rejects the  
hypothesis that is for  
Methodology

→ Automatic detection & Resolution of lexical Ambiguity

It is limited only to some concepts like co-referencing, the transfer to other Conceptual Models & user evaluation. It does not assume a great quality like the current techniques. Cannot be easily turned into other models.

→ Bring Mechanism of Ambiguity Resolution

In this literature only the precise location of these activations are highly variable. There is no evidence for cognitive mechanism being involved in the Brain Region to link & resolve lexical Ambiguity.

→ Applications of NLP & Ambiguity Problem

Word Sense Disambiguation is used. It works fine with the primary application of NLP. But no evidence for deeper insights like vast amount of unstructured data, filtering, analyzing, extraction, training.



→ LSTM Models & lexical  
ambiguity

when using this model  
without linking the double  
objective forces the model  
the predictive states are ob-  
-served without observing the  
Requested target output. Hence  
it becomes hard in recovering  
the word. Even more worst  
Results are obtained if forget  
to link this with another concept

→ Represent lexical  
Ambiguity  
in prototype Models of  
lexical Semantics

The dataset used should Mostly  
contain homonyms in order to  
follow this Technique. The Rest  
of the homographs & homophones  
have no clarity in clearing  
the lexical ambiguity

Work done so far

Literature Review for all the papers Related to dealing with lexical ambiguity.

Understanding the previous literature in the paper

Learning about the algorithms and in previous paper

Current work in progress  
Searching for the suitable

algorithm that Best deals with deeper insights in NLP applications

→ Learning the algorithm.

Simplest - nearest neighbors with Contextual Embeddings

Future actions

Implementing this algorithm on large set of data i.e

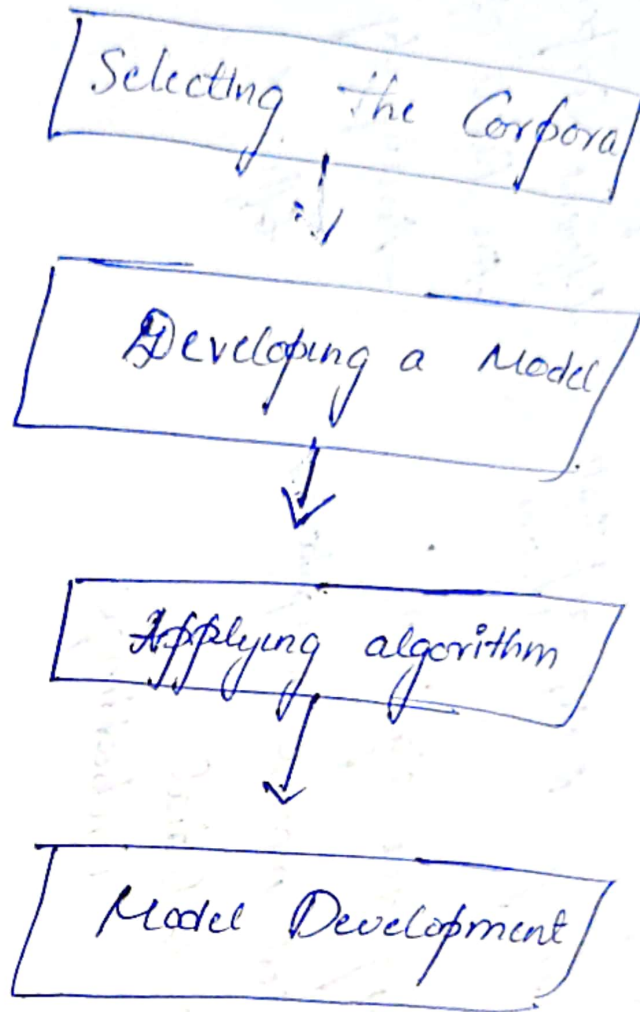
Different Corpora & find

the Result of the lexical

Ambiguity of it works

Effective.

# Work flow



19  
20

S. vijaya kish  
201

# Lexical Ambiguity & NLP applications

project  
Diary

student

180031111

G. Nageswar Kumar

## Overview.

This is a Machine learning based application  
Developed in python language. The intention of this  
project is to Reduce the Ambiguity in the  
Sentences & to know the importance of NLP applications

## Requirements

→ Anaconda 3

phases  
5/8/21

work done so far.  
selected the issues &  
-nd problems in  
ambiguity.

guide/mentor  
signature

8/21

we was Trying to  
gather the Require-  
-ments

Srinjaya Krish  
n/8/21

17/8/21

we gathered the  
Requirements of the project

24/8/21

Installing the Required  
Software

30/8/21

Started to gather  
the Required Corpus

S. vijaya

7/9/21

Continued to Research on  
[D] Corpus for inputs/outputs  
prediction

9/9/21  
to  
16/9/21

we are Trying to develop the  
code so that we can develop  
the application & some of the  
functionalities

S. vijaya Krish

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