Academic Year 2024-25
List of Experiments

Class: BE (Sem VII)
Course: Natural Language Processing Lab   **Course Code:** CSDL7013
Lab Outcomes

Sr. No. of CO	Course Outcomes
CO1	Apply various text processing techniques
CO2	Design language model for word level analysis
CO3	Design, implement and analyze NLP algorithms
CO4	Realize semantics of English language for text processing
CO5	To apply NLP techniques to design real world NLP applications such as machine translation, sentiment analysis, text summarization, information extraction, Question Answering system etc.
CO6	Implement proper experimental methodology for training and evaluating empirical NLP systems

Sr. No	Name of the Experiment
1.	Study various applications of NLP and Formulate the Problem Statement for Mini Project based on chosen real world NLP applications: [Machine Translation, Text Categorization, Text summarization, Chat Bot, Plagiarism, Spelling & Grammar Checkers, Sentiment / Opinion analysis, Question answering, Personal Assistant, Tutoring Systems, etc.]
2.	Apply various text preprocessing techniques for any given text: Tokenization and Filtration & Script Validation
3.	Apply various other text preprocessing techniques for any given text: Stop Word Removal, Lemmatization / Stemming
4.	Perform morphological analysis and word generation for any given text
5.	Implement N-Gram model for the given text input
6.	Study the different POS taggers and Perform POS tagging on the given text
7.	Perform chunking by analyzing the importance of selecting proper features for training a model and size of training
8.	Implement Named Entity Recognizer for the given text input
9.	Implement Text Similarity Recognizer for the chosen text documents
10.	Exploratory data analysis of a given text (Word Cloud)

Subject I/Cs

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