

# School of Computer Science Engineering and Technology

Course- B. Tech  
Course Code- CSET346

Year- 2022  
Date: 30-08-2022

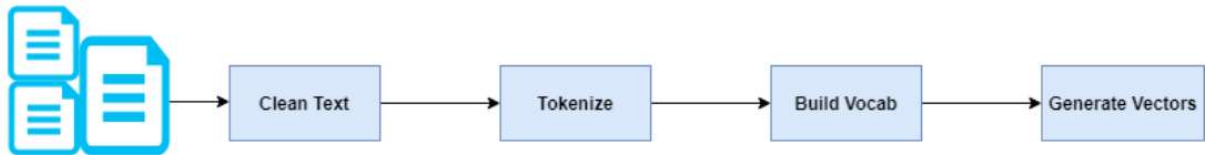
Type- Elective  
Course Name: Natural language  
processing  
Semester- odd  
Batch- ALL

## Lab Assignment 03 – Word Vectorization

### CO-Mapping

| Exp. No. | Name               | CO1 | CO2 | CO3 |
|----------|--------------------|-----|-----|-----|
| 03       | Word Vectorization | ✓   | ✓   | --  |

**Objective:** The main objective of this assignment is to know how to convert words into numerical vectors and its application.



**Count Vectorizer:** It creates a document term matrix, which is a set of dummy variables that indicates if a particular word appears in the document.

**Problem1.** Choose any text data of your choice and apply count vectorizer to convert the word into vectors after applying data cleaning and tokenization.

**One-Hot Encoding:** Represent each unique word in vocabulary by setting a unique token with value 1 and rest 0 at other positions in the vector

**Problem2.** Apply the OHE technique for the above problem.

**Bag of Words:** It takes a document from a corpus and converts it into a numeric vector by mapping each document word to a feature vector for the machine learning model.

**Problem 3:** Take an open-source text data, pre-process the data and apply Bag of Words techniques and display the vectors.