**Text Classification through NLP and Machine Learning Models**

***Abstract*** – Exponential growth of documents and their text, categorization all be formulated as text classification problems. Natural Language play key role with a complex problem “huge dimension of text or document features” to classify the documents and unstructured text into single class or multiple classes. After a major investigation of document classification and classification algorithms it get to know different steps to produce effective results like appropriate preprocessing, embedding methods and classification algorithms like Adaptive, Dynamic. Accuracy cannot be achieved good even multiple classifiers combined for productivity, so applying relative steps to result in more accuracy even for a single classifier by tuning parameters, selecting different classifiers and etc. It may be expensive and not feasible with time constraints of number of documents and huge text content involvement.

1. INTRODUCTION

2. DATA

3. Natural Language Processing (NLP)

4. WORD EMBEDDING

5. Machine Learning Models

6. EVALUATION

7. CONCLUSION