

## Day - 1

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- Introduction to Language Processing: The first session of the training will introduce the concept of natural language processing, its importance, and its applications.
- Text Preprocessing: The second session will cover the basics of text preprocessing, which involves cleaning and transforming raw text data into a format that can be used for language processing tasks.
- Text Classification: The third session will cover text classification, which involves assigning predefined categories or labels to text documents. This session will cover popular classification algorithms such as Naive Bayes and Support Vector Machines (SVM).
- Sentiment Analysis: The fourth session will focus on sentiment analysis, which involves analyzing the emotion and tone of a text document. This session will cover techniques for sentiment analysis such as lexicon-based methods and machine learning-based methods.
- Named Entity Recognition: The fifth session will cover named entity recognition, which involves identifying and classifying named entities such as people, organizations, and locations in text data.

## Day - 2

- Word Embeddings: The first session of day 2 will cover word embeddings, which are vector representations of words that capture their semantic meaning. This session will cover popular word embedding algorithms such as Word2Vec and GloVe.
- Text Summarization: The second session will focus on text summarization, which involves generating a concise summary of a longer text document. This session will cover popular summarization algorithms such as extractive and abstractive summarization.
- Machine Translation: The third session will cover machine translation, which involves translating text from one language to another. This session will cover popular machine translation models such as Neural Machine Translation (NMT).
- Dialogue Systems: The fourth session will cover dialogue systems, which involve generating responses to natural language queries or statements. This session will cover popular dialogue system architectures such as retrieval-based and generative models.
- Advanced Topics: The final session will cover advanced topics in language processing such as deep learning-based methods, attention mechanisms, and transfer learning. This session will also provide an overview of current research trends in language processing.