

# NLP Course Outline

## **Sessions-1:** Introduction to NLP and text classification

- Introduction
- Text preprocessing
- BeautifulSoup (Later)
- Tokenization
- Lemmatization and stemming
- Feature extraction
- Sentiment analysis
- Spam filtering
- Named entity recognition

## **Sessions-2:** Word embedding

- Word2vec
- CBOW
- Skip gram , Word Cloud
- Glove
- Document similarity

## **Sessions-3:** Web Scraping

- Information retrieval from social media
- Working with Beautiful soup
- Hands on case study

## **Sessions-4:** Sequential Models

- Definition
- RNN
- LSTM
- GRU
- Encoder-decoder
- Hands-on - LSTM
- Applications of LSTM

# NLP Course Outline

## **Sessions-5:** Advanced topics

- Neural Machine Translation
- Transformers
- BERT
- XLNet

## **Sessions-6:** Case study