

Natural Language Processing Curriculum

Course Overview:

Learn A-Z everything about NLP From the basic to advanced.

What You Will Learn:

- ❖ Basic fundamentals of Natural Language Processing.
- ❖ NLP components – Natural Language Understanding and Natural Language Generation.
- ❖ NLP Phases - Lexical / Morphological analysis, Syntactic analysis, Semantic analysis, Discourse integration, Pragmatic analysis, Word Sense Disambiguation.
- ❖ Various Text preprocessing and Feature extraction techniques.
- ❖ Recurrent Neural Networks (RNN), LSTM, GRU, Encoder and Decoder, Transformers and Hugging Face Transformers .
- ❖ API development using FASTAPI framework.
- ❖ Web scraping techniques.
- ❖ Hands on experience in real world projects.
- ❖ Natural Language Processing interview questions.
- ❖ Natural Language Processing mock interview preparation.
- ❖ Helping resume creation.

Requirements:

- ❖ Carry your own laptop with decent configurations.
- ❖ Knowledge about Python programming language.
- ❖ Machine learning and Deep learning concepts.
- ❖ Familiar with TensorFlow and Pytorch frameworks.

Syllabus:

Section	Topic
1	Introduction of course
2	Fundamental of Natural Language Processing
3	Phases of NLP
4	Text Exploration and Preparation
5	Feature Extraction Techniques
6	Recurrent Neural Network (RNN)
7	Long Short-Term Memory (LSTM)
8	Gated Recurrent Units (GRU)

9	Encoder & Decoder Models
10	Attention Mechanism
11	Transformers
12	Hugging Face Transformers
13	Additional knowledge