

J.B. INSTITUTE OF ENGINEERING AND TECHNOLOGY

(UGC AUTONOMOUS)





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NATURAL LANGUAGE PROCESSING Report

Module Number: 2

Key Topics Covered: Text Preprocessing, Feature Extraction NLP with Machine Learning

Text Pre-processing

Tokenization (word, sentence)

Normalization: lowercase, punctuation removal

Stop word removal Hands-on with NLTK

Resource Person(s): Mrs.K.Pooja and Mr.M.Syam Babu

Date and Time of Session: 24.10.2025 and 1.30pm to 3.30pm

Duration:2h

Mode of Delivery: Face to Face and Power point presentation

Target Audience: 2nd and 3rd year students

Number of Participants: 52

Venue: A-403

Objectives of the Course Module:

 To make human-computer communication more intuitive and efficient by allowing computers to understand and process language in its natural

 To develop machines that can comprehend and react to spoken and written text, accounting for complexities like slang, accents, and

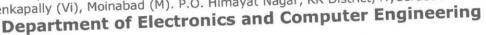
To enable computers to produce coherent, contextually appropriate, and

useful text or speech in response to human input.



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Hyderabad, Telangana, India



Expected Learning Outcomes of the Module:

By the end of the module, students could:

- The ultimate goal is to enable computers to understand and process human language as effectively as humans do.
- Tokenization is the process of breaking text into smaller units called tokens
- NLTK (Natural Language Toolkit) is a popular Python library for NLP tasks.
- NLP provides valuable insights from text and speech data, making interactions with technology more intuitive and efficient.

Summary:

Natural language processing (NLP) is a subfield of computer science and artificial intelligence (AI) that uses machine learning to enable computers to understand and communicate with human language.

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