



**Sri SAIRAM**  
COLLEGE OF ENGINEERING  
Anekal, Bengaluru

Accredited by NAAC  
ISO 9001:2015 Certified Institution  
Approved by AICTE, New Delhi  
Affiliated to Visvesvaraya Technological University  
www.sairamce.edu.in

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Date: 8/12/2020

Submitted to Principal,

Sub: Requesting to conduct Higher education webinar –Reg

Respected sir,

With respected to above subject, Higher education Cell going to schedule Webinar Career opportunities in Deepening in Natural language processing with sklearn and tensorflow on dated 28<sup>th</sup> and 29<sup>th</sup> December 2020 @ 10pm to 12pm (2Hr per day). This program will be conducted for CSE 5<sup>th</sup> & 7<sup>th</sup> sem students.

We would like to Host Webinar on "Career Guidance on Higher Education on Natural language processing with sklearn and tensorflow" by PALE Technologies. Bangalore. This webinar would be conducted exclusively for Sri Sairam College of Engineering students. The webinar will give a platform for the students to get all updates amid Covid 19 and answers all kinds of confusions and doubts regarding career opportunities in abroad.

With this I am requesting principal sir to permit me to conduct the program on 28<sup>th</sup> & 29<sup>th</sup> Dec 2020 Monday & Tuesday 10:00am to 12:00pm (for 2:00 Hr/day).

Please do the needful sir.

Thanking you

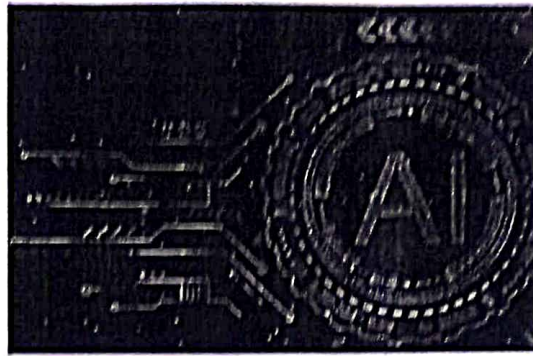
Yours faithfully

*RB 8/12/20*  
Raghavendraro B  
HEC- Coordinator.

*Forwarded to the Principal*

*RB*  
*8/12/20*

*8/12/20*



# **NATURAL LANGUAGE PROCESSING WITH SKLEARN AND TENSORFLOW**

## **Overview & Purpose**

The purpose of this training is to build Natural Language Processing projects with Machine learning Library Sklearn and Deep learning Library Tensorflow

## **Pre Requisites**

1. Should have python knowledge
2. Should be good in using data structures of Python like Lists, tuples, Dictionaries etc.

## Objectives

1. Understanding How Machine Learning Works
2. Understanding Deep Neural Network Works
3. Understanding NLP, NLTK, Sklearn, Tensorflow and Keras
4. Building AI project with NLP, NLTK, Sklearn, Tensorflow, Keras

## Software Requirements

1. Python 3.8
2. Jupyter notebook

## Day wise Content

### Day 1 : Introduction To Natural Language Processing

1. Introduction to NLP
2. Data clearing using NLTK Functions
3. Feature Extraction using Count Vectorizer , TFIDF algorithms
4. Project-1 : Spam Classification
5. understanding project flow
6. splitting the data using sklearn functions
7. Applying machine learning algorithms from Sklearn
8. Gauging the algorithm performance

### Day 2 : Deep learning, NLP

1. Introduction to Deep Learning
2. Understanding How Neural Networks work
3. Tokenization
4. padding
5. Truncating
6. Extracting features using word Embeddings
7. Training Deep neural Network from keras sequential Model
8. Project-2 : Amazon reviews sentiment analysis







<sup>5th</sup>  
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DEVELOPMENT  
GOALS



**WEBINAR / WORKSHOP ON**  
**"DEEP LEARNING, AI, NLP, NLTK"**

**PROGRAM SCHEDULE- 28.12.2020**

1.	<b>Welcome Address – Prof.Raghavendraraao. B, Program Coordinator</b>	<b>10:00AM</b>
2.	<b>Presidential Address -Dr. B. Shadaksharappa, Principal.</b>	<b>10:03AM</b>
3.	<b>Introduction of the Speaker – Dr.P.Bindhu Madhavi Head of the Department</b>	<b>10.:06AM</b>
4.	<b>Presentation by speaker</b>	<b>10:08AM- 12:50PM</b>
5.	<b>Q &amp; A- Participants</b>	<b>12:55PM</b>
6.	<b>End of First Day Session</b>	<b>1:00PM</b>

*26/12/2020*



# Natural Language Processing with python

Learn NLP concepts and how to build a language-aware data product.

Date: 28 and 29th September 2020  
 Hosting On  Ola

REGISTER HERE

Prof. Kalamani P, Prof. Raghavendrarao B

Coordinators

Dr. P Bindhu Madhavi

HOD

Dr. B Shadaksharappa

Principal

Sri Sai Prakash LeoMuthu

Chairman & CEO, Sairam Institutions

Organized by:  
 Department of Computer Science and Engineering



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python



Platform for experimenting Natural Language Processing through Python programming  
 Using various libraries and tools for processing with an emphasis on  
 Built-in features of Python for processing  
 Open Source

Why Natural Language Toolkit (NLTK)?

26/09/2020