

One Week Faculty Development Program on

**STATISTICS FOR  
ARTIFICIAL INTELLIGENCE  
& MACHINE LEARNING**

**Online Registration Details**

<https://forms.gle/HaFz4ygFjYh38GcD8>

**No registration fee**

**E-certificate will be provided**

**For any Queries Contact**

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Principal  
Ravindra College of Engineering for Women



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**STATISTICS FOR  
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&  
MACHINE LEARNING**

**DATES**

**02 NOV 2020 - 07 NOV 2020**

**Coordinators**

**Dr T Tirupal  
Mrs P Ragha Vardhani**

**Organized by**

**G PULLAIAH**

COLLEGE OF ENGINEERING & TECHNOLOGY  
(Autonomous)

**RAVINDRA**

COLLEGE OF ENGINEERING FOR WOMEN

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[www.gpcet.ac.in](http://www.gpcet.ac.in)

[www.recw.ac.in](http://www.recw.ac.in)





# RELEVANCE OF WORKSHOP

## About FDP:

Statistics plays an important role in conceptual understanding of data centric strategies emerging out of Artificial Intelligence and Machine Learning concepts. The pre requisites for these technologies requires a strong foundation of Statistics. This is the first program of the series.

## Objectives:

- To introduce the need of statistics in AI and ML
- To understand the concepts of descriptive and inferential statistics.
- To introduce concepts of python required for statistics for AI and ML
- To understand regression and implement the same in python

## Learning outcomes:

The following are the outcomes of the workshop

- Describe the descriptive statistical concept
- Implement basic Python Programming features
- Practice on the standard libraries of python
- Describe the inferential statistics and regression concepts
- Analyze secondary data using inferential statistic
- Analyze given data sets on python using the appropriate concepts

## OUR ADVISORS

**Prof.E.Keshava Reddy**  
**Department of Mathematics,**  
**JNTUA College of Engineering,**  
**Ananthapuramu**

**Prof. Raghavendra Rao Chillarige**  
**Senior Professor, School of CIS**  
**University of Hyderabad, Central**  
**University, Hyderabad**

**Prof. SALMAN ABDUL MOIZ**  
**School of Computer & Information**  
**Sciences(SCIS),, University of Hyderabad,**  
**Gachibowli, Hyderabad**

DAY	SESSION 1 (10.00 AM – 12.00 PM)		SESSION 2 (2.00 PM - 4.00 PM)	
	RESOURCE PERSON	TOPIC	RESOURCE PERSON	TOPIC
DAY 1	Prof. C R Rao	Keynote address on “Role of Statistics in AI and ML”	Mr. Himayatullah Sharief	Basics of Python: Features, installation, operators, control statements, modules and functions
DAY 2	Dr. Venugopala Rao	Descriptive Statistics & Data taxonomy (types of data, data tabulation, proportions, Measures of Central tendency, Measures of dispersion, Applications)	Dr. Abdul Basit	Introducing Libraries: Strings, Lists, Numpy, Scipy, Pandas
DAY 3	Prof. C R Rao	Basic Graphs and Charts: Line graph, Bar graph, Pie chart, Box plots Histograms, Ogive and scatter plots, Distribution and their properties- Binomial, Geometric, Poisson, Uniform, Exponential, Beta type-I, Normal	Prof. Salman Abdul Moiz	Reading and writing & data Descriptive Statistics
DAY 4	Prof. E. Keshava Reddy	Inferential Statistics: (Estimation testing of Hypothesis, Goodness of fit, Pearson-r, Chi-square, t-test, ANOVA) with applications.	Prof. Salman Abdul Moiz	visualization and Inferential Statistics using Python
DAY 5	Prof. E. Keshava Reddy	Linear regression	Dr Hima Bindu	Linear regression using Python
DAY 6	Dr. Venugopala Rao	Logistic, multinomial and Poisson regression	Dr Hima Bindu	Logistic and multinomial regression using Python