



SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)

Sree Sainath Nagar, Tirupati - 517102

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

**A Three Week HANDS on SDP on "MACHINE LEARNING
USING PYTHON"**

(14 Feb 2022 to 05 March 2022)

A Three-Week SDP programme on "**Machine Learning using Python**" was successfully conducted in the Department of Electronics & Communication Engineering, on **14th Feb – 05th Mar 2022**, in association with APSSDC. The SDP programme received an overwhelming response with overall 200 participants.

The programme was inaugurated in the evening by **Dr.N.Gireesh**, Professor & Head, Department of ECE, Sree Vidyanikethan Engineering College, Ashreetha.B & Praveena.K (Coordinator, SDP). Followed by the felicitation the expert lecture was delivered by Lohitha on the topic Introduction to Machine learning (ML) On the whole the SDP received a lot of positive feedback from participants and it paved the way for participants to implement their Ideas in Machine learning.

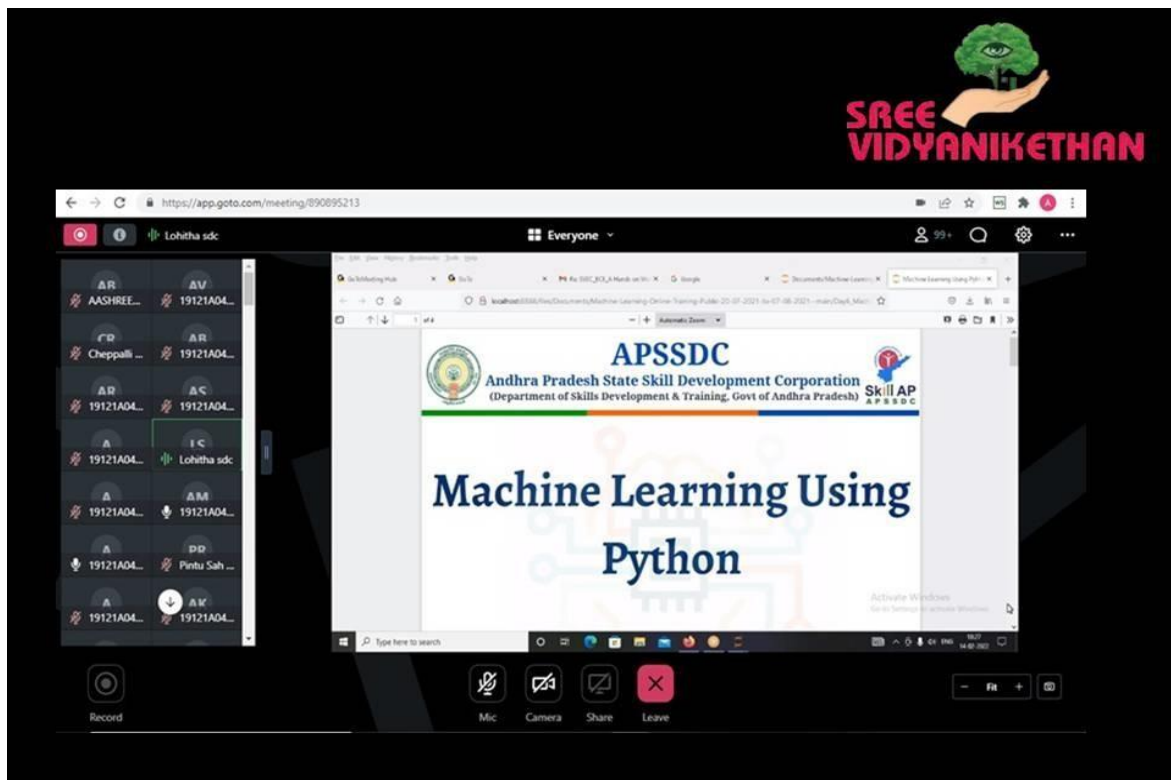
On Week 1 contents covered are Introduction to Machine Learning, Issues and Case studies, Descriptive statistics and Inferential statistics which is most essential for any learning algorithms. The last session covers Introduction to Python and problem solving in python.

On Week 2 Session 1 and Session 2 continues with problem solving using python followed Hackathon in Python using Xobin bootcamp online platform. Session 3 and 4 covers Pandas for handling real dataset, Numpy for using mathematics library and Matplotlib for visualization using Jupyter notebook. For each of the content

trainer solved one case study followed by second problem to be solved by the participants. All participants completely engaged with Python Hangover.

On Week 3 Session 1 and 2 covered Randomized Algorithms for predictions, Binarization of the dataset, Confusion matrix and performance metrics for predictions like precision, accuracy and recall. Session 3 and 4 covers Linear regression, logistic regression and Multivariate regression for Raw Datasets and Actual data sets. Perceptron which is a modeling of Human Brain Neuron and all are implemented with different datasets and observed the behavior of the Perceptron. Session 2 Covers most powerful classifier Naiive Bayes for different datasets. Session 3 and 4 covers Support Vector Machine and K Nearest Neighbor classifier with case studies. , Concept of Back Propagation, Linear Vector Quantization (VCQ) Principal Component Analysis, Natural Language Processing / Text Mining using Tensor flow and Recommendation Systems / Sentiment Analysis using Tensorflow.

GLIMPSES OF SDP





https://app.goto.com/meeting/890895213

Everyone

AB AASHREETHA B
PV Pamuru Varshini
CR Cheppalli Naga S...
BS B Shilpa Sreya
BF Bijarapu Deep K...

Settings

Audio Camera General

Preview

Camera HD WebCam (0408:a030)

Record Mic Camera Share Leave



Everyone

AB AASHREETHA B
AV 19121A04G8_Pa...
CR Cheppalli Naga S...
AB 19121A0422_Sha...
AP 19121A0422_Bjar...

People 185/251

Lohitha sdc Organizer

19121A0402_A_H...
19121A0403_Ko...
19121A0404_ma...
19121A0405_A_S...
19121A0409-Yas...
19121A0410_AA...
19121A0413_Ud...
19121a0415_Ga...
19121A0417_BJ...
19121A0418 Ban...
19121A0420_VE...

Session ID: 890-895-213

Copy session link

jupyter Day1 (unsaved changes)

```
1 ### Python  
2 - high level, general purpose and interpreted language  
3   - *high level*  
4   - user understandable language  
5   - *general purpose*  
6   - used for many purposes such as :applications in mbl, system  
7   s/wa, scientific computation  
8   - interpreted language  
9   - gives the line by line execution  
10  
11 - Features  
12   - easy to learn and simple to code  
13 - **Applications of Python**  
    - DA, ML, AI (Data Science), Web development, Robotics, IOT
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