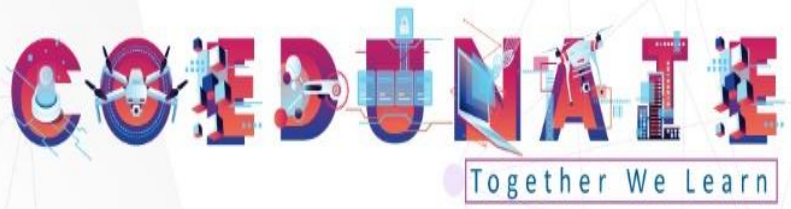
SILVER OAK UNIVERSITY
EDUCATION TO INNOVATION

IEEE | Silver Oak University IEEE Student Branch

A REPORT ON

CoEdunate: Learn How Machine Learns Part-2

Date: 3rd-4th July, 2021
Platform: Zoom Meeting



LEARN HOW MACHINE LEARNS

Introduction

Silver Oak University IEEE Student Branch always works on the advancement of the students by providing the opportunity to learn, develop new technical skills, and network with fellow student members. With the same virtue, SOU IEEE Student Branch had initiated a learning workshop **"CoEdunate: Learn how Machine Learns"** under the program, "CoEdunate: Together We Learn", exclusively for our Student Branch members. The motto behind conducting this event was to explore and deep dive into the Basics of Data Science with Python and Core Machine Learning.

About the Speaker

This workshop was conducted by our talented Student Branch members, **Ojas Wani** and **Zeeshan Deradiya**. Both the mentors have great knowledge of Python libraries and Machine Learning. They have also made several projects using Machine Learning.

About the Session

Date: 3rd – 4th July, 2021
Time: 02:00 PM to 4:00 PM IST
Platform: Zoom Meeting
Participants: 15

The workshop was conducted in two parts, Part-1 and Part-2 along with regular doubt solving sessions.

Day 4 (Dated on 3rd July 2021)

On the first day of the workshop, Ojas Wani commenced the session. He gave a brief introduction about Machine Learning. And then he explained Simple Linear regression, Multilinear regression, Exploratory Data Analysis. And he showed how the linear regression model is implemented. The session ended up giving a short overview of Logistic Regression.

Day 5 (Dated on 4th July 2021)

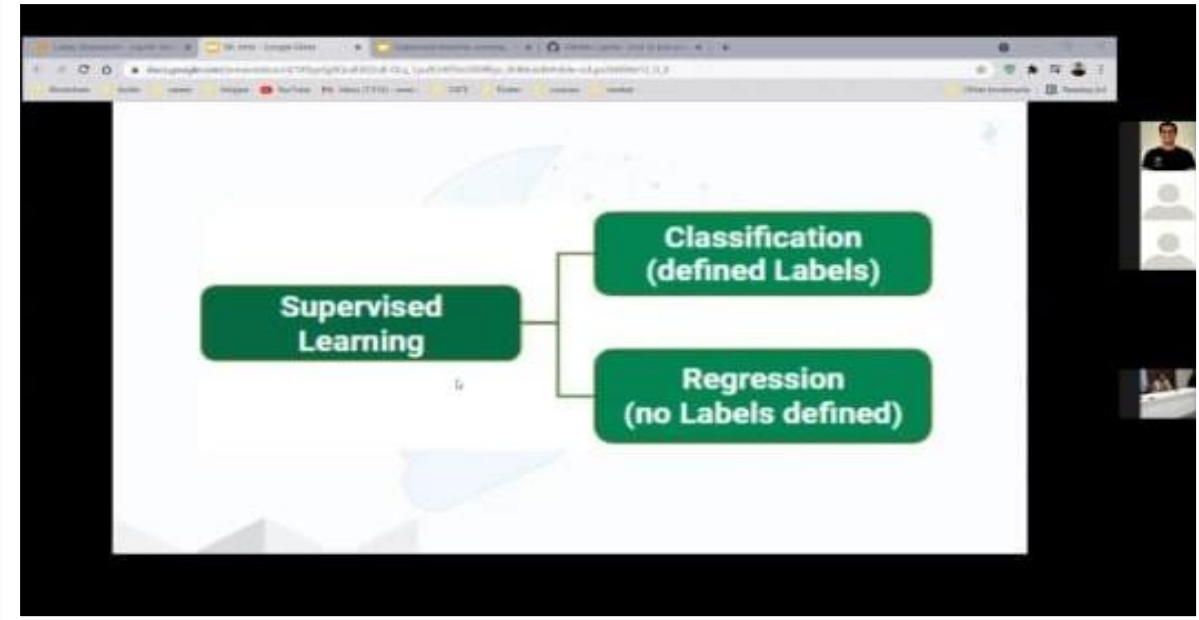
On the second day of the workshop, Ojas Wani revised yesterday's topic and started a new topic of Logistic Regression. He gave a brief explanation on Logistic Regression. He showed a live logistic regression model example. At the end, concluded with a doubt solving session.

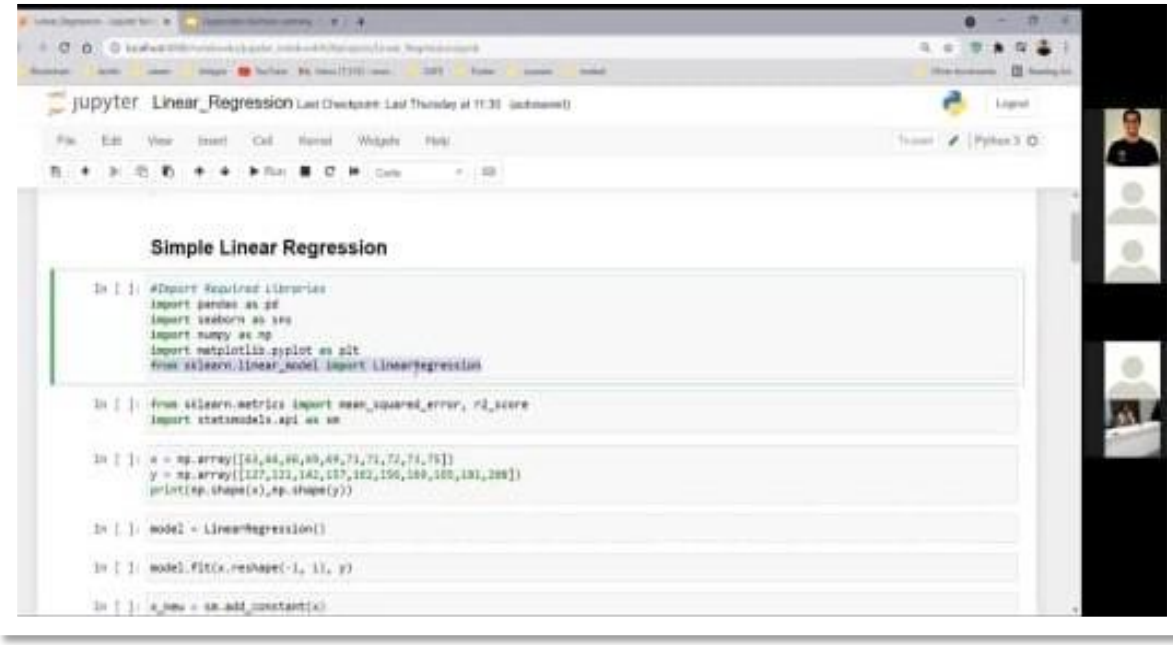
Conclusion

The workshop was concluded by thanking Ojas Wani and Zeeshan Deradiya, two of our talented and amazing speakers, for sharing their knowledge with their Batch Members. We expressed our gratitude towards the management of Silver Oak University and Dr. Saurin Shah, Provost, Silver Oak University. Dr.Satvik Khara, and Founding Member Silver Oak University IEEE SB. Prof. Mayuresh Kulkarni, Branch Counselor of Silver Oak University IEEE SB, and Prof. Viren Patel, Advisor of Silver Oak University IEEE WIE AG for always supporting and encouraging us.

We also thanked all the enthusiastic participants and the whole team of Silver Oak University IEEE SB who worked hard to make this event successful. The workshop was full of wonderful ideas and was great insightful information by the students to uplift their skills. We sincerely look forward to organizing such more informative and brain teasing workshops.

Some glimpse of the event


Supervised Learning
Classification (defined Labels)
Regression (no Labels defined)


jupyter Linear_Regression
Simple Linear Regression
#Import Required Libraries
import pandas as pd
import seaborn as sns
import numpy as np
import matplotlib.pyplot as plt
from sklearn.linear_model import LinearRegression
from sklearn.metrics import mean_squared_error, r2_score
import statsmodels.api as sm
x = np.array([63,64,66,69,69,71,71,72,73,75])
y = np.array([127,121,142,157,162,156,169,165,181,208])
print(np.shape(x),np.shape(y))
model = LinearRegression()
model.fit(x.reshape(-1, 1), y)
x_new = sm.add_constant(x)