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EDUCATION TO INNOVATION



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A REPORT ON

Getting into Data Science using Python

Date: 1st and 2nd June, 2020

Place: YouTube Live

Getting into Data Science using Python



Introduction:

Silver Oak University IEEE WIE Affinity Group always emphasizes on enhancing the knowledge of students in the field of technology. Keeping the same in mind, a two-day workshop titled “Getting into Data Science using Python” was organized on 1st and 2nd June 2020. The sole purpose behind organizing this workshop was to comprehend the fundamentals of the most demanding field in today’s technical era, Data Science and Python alongside some of its libraries. The event had begun with the basics of data science and was carried out with the hands-on practice of Python language and some Data Science concepts.

This event was open for all and with a view to expand this knowledge with other learning enthusiasts, the entire event is accessible on the official YouTube channel of Silver Oak University IEEE SB. We had a very talented and highly experienced person for conducting this workshop.

Expert Introduction:

Mr. Sajjad Hussain:

He is currently a Data Science Lead, REM at Trafigura. Moreover, he is a former co-founder at Heuristech Labs and has also contributed to the E-commerce space. He has also been a full-stack data scientist with more than 7 years of experience.

About the Session:

Day 1:

Date: 1st June, 2020

Time: 6:00 PM - 8:15 PM IST

Channel Name: Silver Oak University IEEE SB

YouTube Link: <http://bit.ly/WIEDSD1>

On the first day of this workshop, Mr. Sajjad Hussain started the session with the brief introduction of Data Science and how Data Science and Data Analytics differs. Moreover, he also discussed the skill sets that are required to become a Data Scientist and some real-time applications of Data Science in various fields. Furthermore, he gave a detailed explanation of Machine Learning Pipeline, Algorithms/Models, Clustering, and Data Science Libraries. He covered all the basic concepts of Python language such as data types, string, list, loops, dictionary, functions, class, and many more during the hand-on practice session. The first session was concluded with the Q/A session wherein students got adequate answers to all their doubts.

Day 2:

Date: 2nd June, 2020

Time: 6:00 PM - 8:15 PM IST

Channel Name: Silver Oak University IEEE SB

YouTube Link: <http://bit.ly/WIEDSD2>

The speaker commenced the second session with a quick recap of day 1 followed by a brief about the topics of day 2. Moreover, he explained principles of Data Representation and discussed various Algorithms and Models along with its working and real-time applications. He also talked about the Bias and Variance Tradeoff and shared some aspects of Performance Evaluation. He had even led a hands-on practice session for a better understanding of different algorithms and libraries such as NumPy and Pandas. At last, a Q/A session was arranged in which participants interacted with the speaker and got their queries resolved. Additionally, he also suggested few resources for learning Data Science and Python.

Conclusion:

The event ended by offering profound thanks to our prominent speaker, enthusiastic participants, and coordinators. More than 900 participants gained the basic idea of the most demanding field, Data Science along with hands-on practice of Python language. As this event has achieved magnificent views and positive responses, we are looking forward to organizing such more beneficial events in the near future.

Some glimpses of the event:



Supervised Learning

STEP 1 Provide the machine learning algorithm categorized or "labeled" input and output data from to learn.

STEP 2 Feed the machine new, unlabeled information to see if it tags new data appropriately. If not, continue refining the algorithm.

TYPES OF PROBLEMS TO WHICH IT'S SUITED

- CLASSIFICATION**: Sorting items into categories
- REGRESSION**: Identifying real values (dollars, weight, etc.)

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Getting into Data Science using Python| Day 1 | Mr. Sajjad Hussain

Day2OceetDS.ipynb

```

[66] dtc1f = DT()
      dtc1f.fit(x_train,x_train)

DecisionTreeClassifier(criterion='gini',
                      max_depth=None, max_features=None, min_samples_leaf=1,
                      min_samples_split=2, min_weight_fraction_leaf=0.0,
                      presort='deprecated', random_state=None, splitter='best')

[67] pred = dtc1f.predict(x_test)
      print(predictions_)
      print("Actual values",list(y_test))

predictions_ ['win' 'win' 'win' 'win' 'win' 'win' 'win' 'win' 'win' 'win']
Actual values ['win' 'win' 'win' 'win' 'win' 'win' 'win' 'win' 'loss' 'loss']

```

Stay tuned and keep learn

Getting into Data Science using Python| Day 2 | Mr. Sajjad Hussain

Day2OceetDS.ipynb

```

[38] data.attacker_size.plot()

matplotlib.axes._subplots.AxesSubplot at 0x7f9377a343f0:

```

missing value #filling

Getting into Data Science using Python| Day 2 | Mr. Sajjad Hussain