Sri Venkateswara College of Engineering



A

REPORT

THREE DAYS ONLINE WORKSHOP

ON

"DATA SCIENCE AND MACHINE LEARNING"

26/06/2020 -28/06/2020

Organized

By

Department of Information Technology

Sri Venkateswara College of Engineering Pennalur, Sriperumbudur-602117

REPORT

THREE DAYS NATIONAL LEVEL ONLINE WORKSHOP ON DATA SCIENCE AND MACHINE LEARNING

Date: 26.6.2020 to 28.06.2020 **Time:** 11.30 am to 1.30 pm

Resource Person:	Mr. Shanthababu Pandian
	Project Manager, CTS (UK)

Objectives:

- Understanding the basics about Data Science and Machine Learning
- Provide Insights About the Roles of a Data Scientist.
- Knowledge on various machine learning Algorithms (MLA), tools and techniques to derive data driven insights
- Apply the techniques learned through Python software
- Explore few real-world examples.

Topics Covered:

Topics	Date	
Introduction to Data Science	26 th June 2020	
Business Intelligence Vs Data Science		
Journey of Data		
What you need for Data Science		
Roles in Data Science Projects		
Data Science Applications		
Data Science Analogy	27 th June 2020	
Life cycle of Data Science		
Why Python for Data Science		
Statistics for Data Science		
Introduction to Python and Package		
Introduction to Machine Learning and Techniques	28 th June 2020	
Machine Learning Process		
Supervised Learning		
Unsupervised Learning		

About the programme:

The Department of Information Technology SVCE conducted Three days online workshop on "Data Science and Machine Learning". Dr. V.Vidhya, HoD/INT, Students and Faculty members of SVCE and other colleges participated in the webinar. The webinar Coordinator Dr.C.Yaashuwanth Asso.Prof/INT welcomed all the participants. The introductory speech about the areas of expertise of the speaker was rendered by Ms.R.Saktheeswari, AP/INT. The speaker of the webinar was Mr.Shanthababu Pandian Project Manager.CTS(UK)

The webinar was an overview of data science and Machine Learning Technique. On Day 1 the speaker focused on Introduction to data science. He briefed about the history and evolution of data science, roles in a data science project, data science life cycle and applications. The analogy of data science explained through a real time scenario helped the participants to have a better understanding of the topic. The mapping of roles to the data science life cycle gave a insight about the data science process.

Day 2 started with a brief recap of concepts covered earlier followed by an in depth discussion on "Python key packages for Data science". The session started with a detailed explanation on how statistics transformed into data science followed by introduction to panda's package. With a sample data set he explained clearly how pandas is used for data manipulation, analysis and cleaning. He also explained about visualization through Seaborn and matplotlib packages . At the end of the session through examples and demonstration the participants were encouraged to apply Exploratory Data Analysis (EDA) and the Data Science process in real time applications.

Day 3 was scheduled as a Hand on session. Mr.Pandian through a sample data set demonstrated the usage of Panda , matplotlib and seaborn packages. All statistical operations were tired and the results were discussed. The session ended with a brief introduction to usage of appropriate Machine Learning technique to pattern recognition, optimization, and decision problems.

The webinar came to an end with a special note by Dr.G.Sumathi Professsor /INT followed by the Vote of Thanks by Ms. R.Saktheeswari , AP/INT. Dr. V.Vidhya, HoD/INT thanked the speaker for making an excellent presentation and all the participants for their active participation.

Course Outcome:

- Participants will develop relevant programming abilities.
- Participants will demonstrate proficiency with statistical analysis of data.
- Participants will develop the ability to build and assess data-based models.
- Participants will describe methods and tools applicable in data science.
- Participants will demonstrate skill in data management.

Coordinators Dr.C.Yaashuwanth Assoc.Prof/INT Ms.R.Saktheeswari AP/INT HoD/INT Dr.V.Vidhya