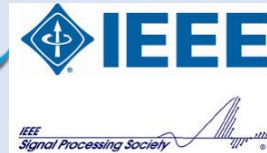**Sarvajanik Education Society**

**Sarvajanik College of Engineering & Technology, Surat.**

**Masters in Computer Applications Department**

**Academic Year 2020-2021**

**Date: 28th December 2020**

## Report on Workshop

**DST- GUJCOST Sponsored Workshop on**
# Data Science Using Python (Online Mode)



### About the Workshop

Data Science is a multi disciplinary field that uses methods, processes, algorithms and systems to extract knowledge and insights from structured and unstructured data. This means that data science helps Artificial Intelligence figure out solutions to problems by linking similar data for future use. Evolved from the study of pattern recognition and computational learning theory in artificial intelligence, machine learning explores the study and construction of algorithms that can learn from and make predictions on data. These analytical models allow researchers, data scientists, engineers, and analysts to "produce reliable, repeatable decisions and results" and uncover "hidden insights" through learning from historical relationships and trends in the data.

### Resource Persons

- Dr. Sanjay Vij
  (Dean - Academics at ITM Universe, Vadodara)
- Dr. Jignesh Doshi
  (Associate Professor, L. J. Institute of Computer Applications, Ahmedabad)
- Dr. Jatinderkumar R. Saini
  (Professor & Director at Symbiosis Institute of Computer Studies and Research, Pune)
- Dr. Mita Parikh
  (Professor, Information Technology, SCET)
- Dr. Jeegar Trivedi
  (Lecturer, PG Department of Computer Science, Sardar Patel University, VallabhVidhayanagar)
- Dr. Dhaval Maheta
  (Assistant Professor, Department of Business and Industrial Management, DBIM, VNSGU)

### Workshop Contents

- Fundamentals of Data Science and Python
- Exploratory Data Analytics
- Using Numpy and "Scikit-Learn" for Data Science
- Supervised and Unsupervised Learning
- Linear and Logistic Regression
- Clustering, Associative Rule Mining
- Classification accuracy of a model
- Case Studies

### Eligibility

Faculty members/Students from technical institutes all over Gujarat are invited to participate.

### No Registration Fees

**E- Certificates** will be provided to all the participants who attend all the sessions and **score min. 60%** in the evaluation quiz at the end of the workshop.

**CALL FOR PARTICIPATION**

DST - GUJCOST Sponsored
Two Days Online Workshop on

**DATA SCIENCE USING PYTHON**

18th - 19th December 2020

Organized By
Masters of Computer Applications Department,
Sarvajanik College of Engineering & Technology (SCET), Surat

| Patron | Convener | Coordinators |
|---|---|---|
| Dr. Hiren Patel | Prof. Kaushika Pal | Dr. Alpa Shah & Prof. Zankhana Vaishnav |
| (Principal, SCET) | (Head – MCA Department, SCET) | (Assistant Professor, MCA Department, SCET) |

Technically Sponsored by
IEEE Signal Processing Society, Gujarat Chapter

For Registrations Click: https://tinyurl.com/GCDSPy or Scan

## Details of the workshop:

| | |
|---|---|
| **Date and Time:** | **18th & 19th December 2020** |
| **Venue:** | Online Event (Cisco WebEx and Google Meet) |
| **Targeted Audience** | Faculty members and students from academia |
| **Coordinated By:** | MCA Department, Sarvajanik College of Engineering & Technology |
| **Participants:** | Total of 249 Registrations |
| **Resource Persons:** | 1. **Dr. Sanjay Vij** - Dean - Academics at ITM Universe, Vadodara<br>2. **Dr. Jignesh Doshi** - Associate Professor, L. J. Institute of Computer Applications, Ahmedabad<br>3. **Dr. Jatinderkumar R. Saini** - Professor & Director at Symbiosis Institute of Computer Studies and Research, Pune<br>4. **Dr. Mita Parikh** - Professor, Information Technology, SCET<br>5. **Dr. Jeegar Trivedi** - Lecturer, PG Department of Computer Science, Sardar Patel University, VallabhVidhayanagar<br>6. **Dr. Dhaval Maheta** - Assistant Professor, Department of Business and Industrial Management, DBIM, VNSGU<br>7. **Prof. Kaushika Pal** – Head, MCA Department, SCET<br>8. **Dr. Alpa Shah** – Assistant Professor, MCA Department, SCET |

## Participation Details:
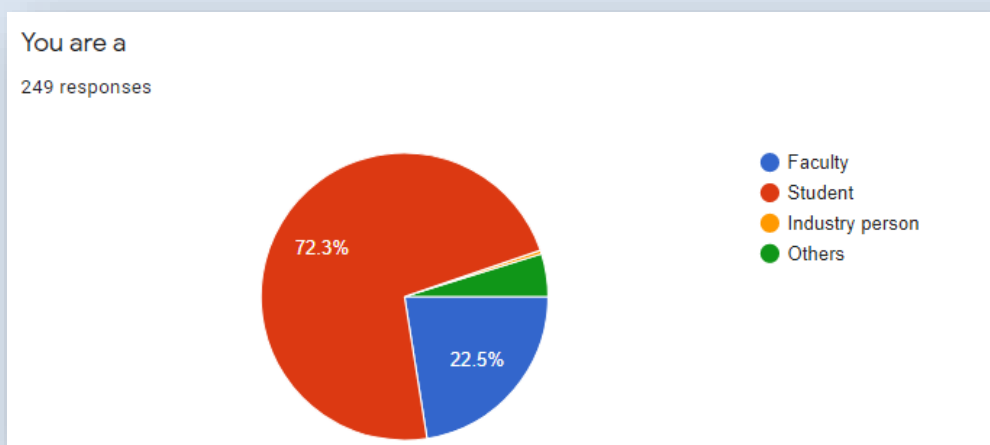
## Final Schedule:

| Sr. No. | Resource Person | Time | Title |
|---|---|---|---|
| **Day 1: 18th Decemeber 2020** | | | |
| 1 | Inaugural | 09:00 am to 09:30 am | **-** |
| 2 | **Dr. Jatinderkumar R. Saini** Professor & Director, Symbiosis Institute of Computer Studies and Research, Pune, Maharashtra | 09:30 am to 11:00 am | **Data Science: What, Why and How?** |
| 3 | **Dr. Jeegar Trivedi** Lecturer, PG Department of Computer Science, Sardar Patel University, Vallabh Vidyanagar. | 11:00 am to 12:30 pm | **Clustering algorithms for Unsupervised Learning** |
| 4 | **Lunch Break** | 12:30 pm to 01:00 pm | |
| 5 | **Prof. Kaushika Pal** Head of Department - MCA, Sarvajanik College of Engineering & Technology, Surat | 01:00 pm to 2:15 pm | **Supervised Learning - Classification** |
| 6 | **Dr. Mita Parikh** Professor, Informatioin Technology Department, Sarvajanik College of Engineering & Technology, Surat | 02:15 pm to 03:45 pm | **Data Analytics: Perspectives on Technique Selection** |
| **Day 2: 19th December 2020** | | | |
| 7 | **Dr. Jignesh Doshi** Associate Professor, L. J. Institute of Computer Applications, Gujarat Technological University, Ahmedabad. | 09:00 am to 11:00 am | **Python Libraries For Data Analysis And Data Mining** |
| 8 | **Dr. Sanjay Vij** Dean (Academics) at ITM Universe ITM University, Vadodara. | 11:00 am to 12:30 pm | **Linear Regression Models** |
| 9 | **Lunch Break** | 12:30 pm to 01:00 pm | |
| 10 | **Dr. Dhaval Maheta** Assistant Professor, Department of Business and Industrial Management, Veer Narmad South Guajarat University, Surat. | 01:00 pm to 2:30 pm | **Unsupervised Learning - Clustering & Associative Rule Mining** |
| 11 | **Dr. Alpa Shah** Assistant Professor, MCA Department, Sarvajanik College of Engineering & Technology, Surat. | 2:30 pm to 04:00 pm | **Evaluating Classification Accuracy Of A Model** |
| 12 | **Quiz and Feedback** | 04:00 pm to 04:30 pm | **-** |

## Some Glimpses of the Workshop:
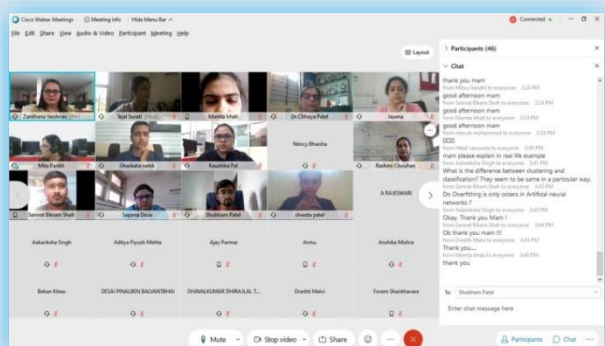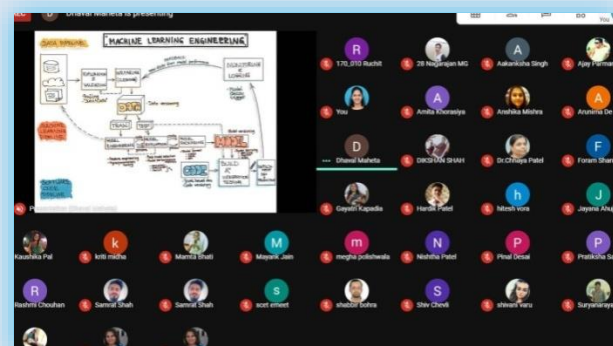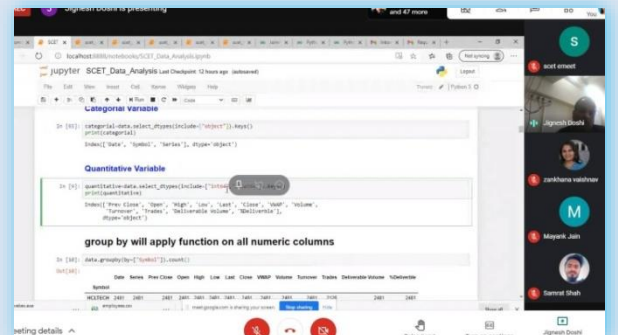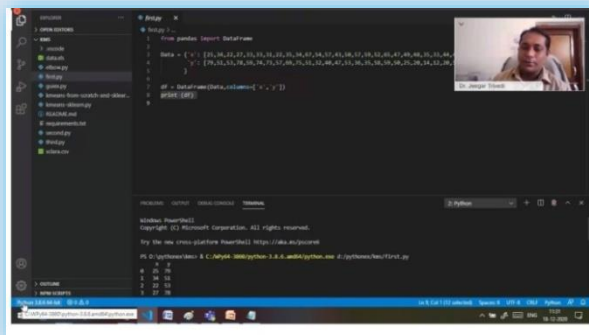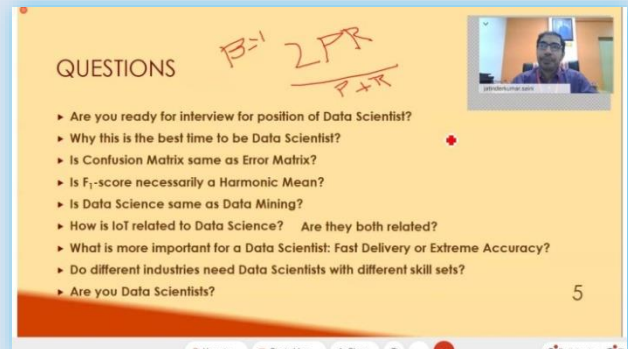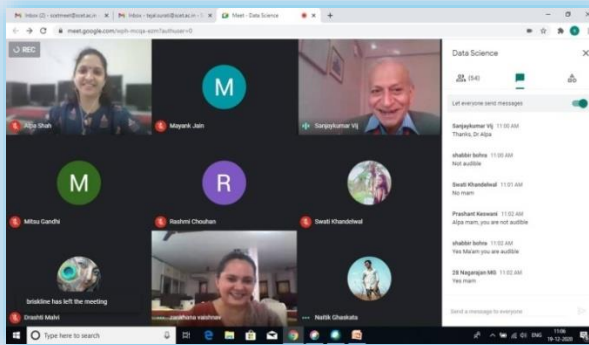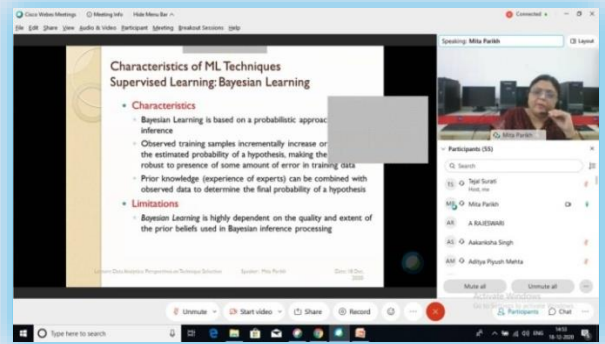
## Feedback of the Workshop:

### Are you satisfied with the selection of experts who delivered talks in this event?
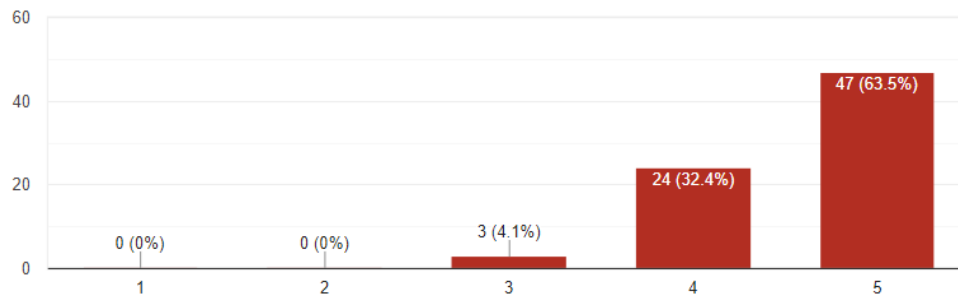74 responses



| Rating | Responses |
|--------|-----------|
| 1 | 0 (0%) |
| 2 | 0 (0%) |
| 3 | 4 (5.4%) |
| 4 | 22 (29.7%) |
| 5 | 48 (64.9%) |
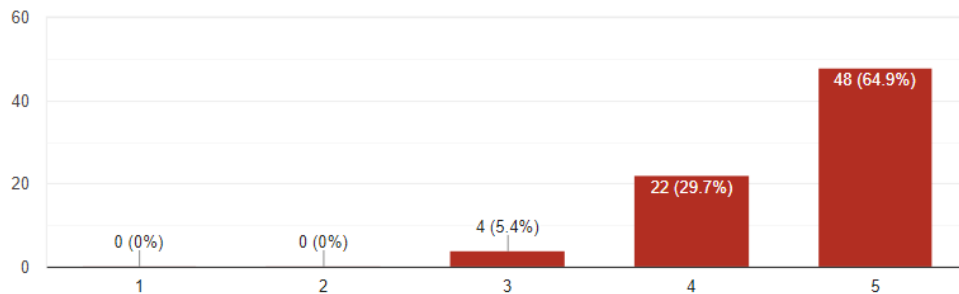
### Lecture of which of the expert(s) did you like the most in this workshop?
74 responses



| Expert | Responses |
|--------|-----------|
| Dr. Jatinderkumar Saini | 43 (58.1%) |
| Dr. Jeegar Trivedi | 40 (54.1%) |
| Prof. Kaushika Pal | 45 (60.8%) |
| Dr. Mita Parikh | 43 (58.1%) |
| Dr. Jignesh Doshi | 44 (59.5%) |
| Dr. Sanjay Vij | 35 (47.3%) |
| Dr. Dhaval Maheta | 42 (56.8%) |
| Dr. Alpa Shah | 53 (71.6%) |
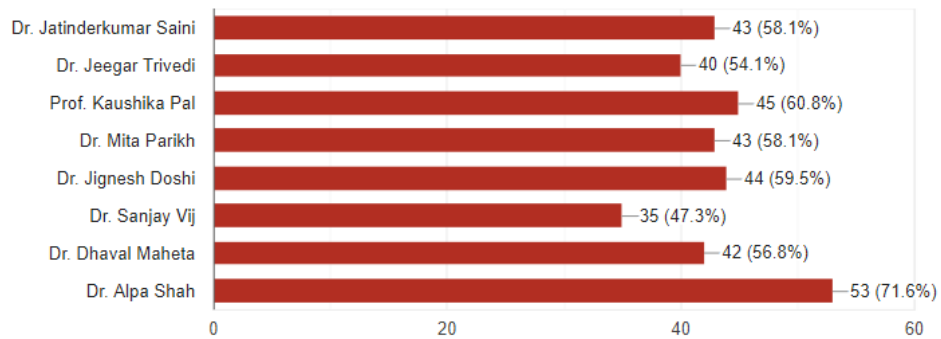
### Please give overall rating to this workshop.
74 responses



| Rating | Responses |
|--------|-----------|
| 1 | 0 (0%) |
| 2 | 0 (0%) |
| 3 | 3 (4.1%) |
| 4 | 24 (32.4%) |
| 5 | 47 (63.5%) |

**Any other suggestion/comment which you would like to give us for improvement**

42 responses

CONTINUE

excellent

Thank u very much for such a wonderful and informative webinar of Data science and Python.

Please do more webinars like this in future too .

Overall it was excellent.

The workshop was Excellent and Imformative

I like the session and it is very useful for myself

Everything was good. Interaction and communication were also good. But i would like to say if the explanation part contains more graphical explanations then, it would have increase the understandability. But apart from them I personally enjoyed the information shared by professors. It was really a great opportunity to get an insight of how data scientist works. Thank you so much.

Overall the response to the workshop was very good and we hope to continue to arrange such workshops in the future.

Our sincere thanks to **Prof. Kaushika Pal** - Head, MCA Department for motivating us to conduct such workshop. We would also like to thank **Dr. Hiren Patel**, Principal, SCET, for providing such conducive environment.

We express our sincere thanks to **DST - GUJCOST** for providing such support of this kind workshop as it is one of the thrust areas and must be explored. Also, we are grateful to **IEEE - Signal Processing Society, Gujarat Chapter** for providing technical support for online meeting platform.

*Report compiled by Dr. Alpa Shah & Prof. Zankhana Vaishnav (Workshop Coordinators)*