Event Report

on

GUJCOST & The Institution of Engineers (India), Vallabh Vidyanagar, Local Center Sponsored

Three Days Workshop on "Data Science and its Applications"

23rd – 25th November, 2020

Organized By:-

Department of Computer Engineering

Madhuben & Bhanubhai Patel Institute of Technology

(A Constituent College of CVM University), New Vallabh Vidyanagar

PROGRAMME SCHEDULE

DAY – 1 (23rd November,2020)	
TIME	SESSION
10:00 AM - 10:30 AM	**Inauguration**
10:30 AM - 12:00 PM	**Session – 1** **Dr. Amit Ganatra** (Dean, FTE and Principal, DEPSTAR, CHARUSAT, Changa) **Topic:** Introduction To Data Science and its Applications
12:00 PM - 01:00 PM	**Lunch Break**
01:00 PM - 03:00 PM	**Session – 2** **Dr. Pooja Jain** (Assistant Professor, Department CS & Engineering, IIIT Nagpur) **Topic:** Hands on Session using Python for Data Science

DAY – 2 (24th November, 2020)	
TIME	SESSION
10:00 AM - 12:00 PM	**Session – 1** **Dr. Dilip Singh Sisodia** (Assistant Professor, Department of CS & Engineering, NIT, Raipur) **Topic:** Machine Learning Techniques
12:00 PM - 01:00 PM	**Lunch Break**
01:00 PM - 03:00 PM	**Session – 2** **Mr. Arshdeep Bahga** (Founder & Director, DeepLearn Solutions Pvt. Ltd.) **Topics:** Big Data & its Applications with Cloud-based Big Data Analytics Stack for Agri-IoT Applications, Real-time Social Media Sentiment Analysis
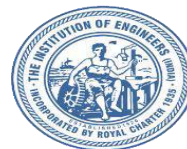
Programme Schedule

DAY – 3 (25th November, 2020)	
TIME	**SESSION**
10:00 AM - 12:00 PM	**Session – 1** **Dr. Shrinivasan K G** (Professor, Dept. of Info. Mgmt. & Coordinator, NITTTR, Chandigarh) **Topics:** Introduction to Deep Learning and its Applications, Research Topics and Industrial Applications in Data Science and Deep Learning
12:00 PM - 01:00 PM	Lunch Break
01:00 PM - 03:00 PM	**Session – 2** **Mr. Rushbh Doshi** (AI / Machine Lead Researcher, APPSIAN) **Topic:** Hands on Session for Deep learning
03:00 PM - 04:00 PM	**Quiz**
04:00 PM - 04:15 PM	**Feedback and Valedictory Session**

The aim of this Workshop is to explain the use of Data Science technology and making attendees aware about development of various applications using it.The Workshop was conducted through Google meet as an online platform. As these topics are the demand for today's industry and society, there is a need to explore the research opportunities in the field of automation. This Workshop will provide a unique platform for enhancing the knowledge of the faculty members and students who are doing research or planning to do research in the mentioned area.

DAY – 1: (23rdNovember,2020)

Inaugural Ceremony was on 23rd November, 2020 at 10:00AM.

Inauguration commenced with Welcome Note by **Prof. Dipti Mathpal**. She warmly welcomed the dignitaries and participants. Then blessings of God were taken by playing Saraswati Vandana by **Prof. Sunit Parmar**.

In the beginning of the function, the Honorable Chairman of CVM and Chief Patron of this Workshop **Er. Shri Bhikhubhai Patel sir** motivated us with his blessings and encouraging words.

After that **Prof. Dr. Archana Nanoty**, Principal, MBIT, gave a brief introduction about how technology has helped us during this pandemic time. She welcomed all the participants of the workshop. She thanked to **Dr. Narottam Sahoo, Member Secretary of GUJCOST & Dr. R.D.Patel**, **IE Chairman of Vallabh Vidhyanagar, Centre** for providing the financial support for this workshop. She also talked about the importance of Data Science. She ended her speech by wishing participants that the workshop will be helpful to them.
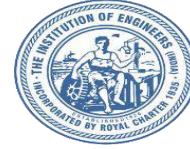
After Principal Madam Speech, **Dr. R.D.Patel** Chairman, IE (INDIA), Vallabh Vidhyanagar Centre and Head, ME Dept., BBIT addressed the participants and shared his views about the importance of this workshop. He discussed about importance of latest technological development considering the present time of COVID-19 pandemic. He also discussed how Information Technology has helped us during this pandemic time.

After that **Prof. N.M Raja,** Head, CE Dept., MBIT warmly welcomed the dignitaries and participants. He gave short introduction about how data science and its applications play an important role in human life. He appreciates to all team members who involved organizing this workshop.
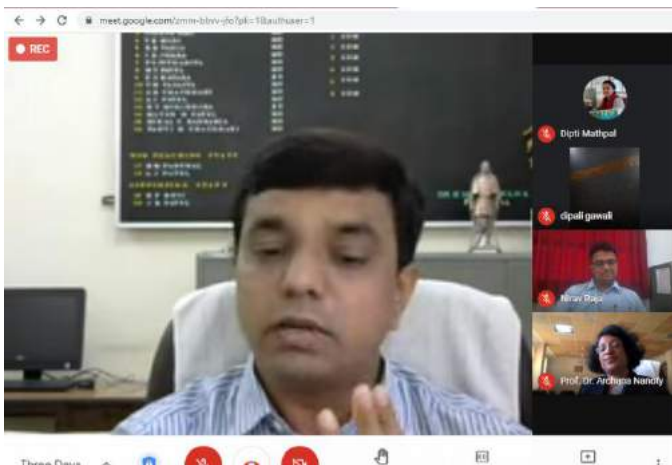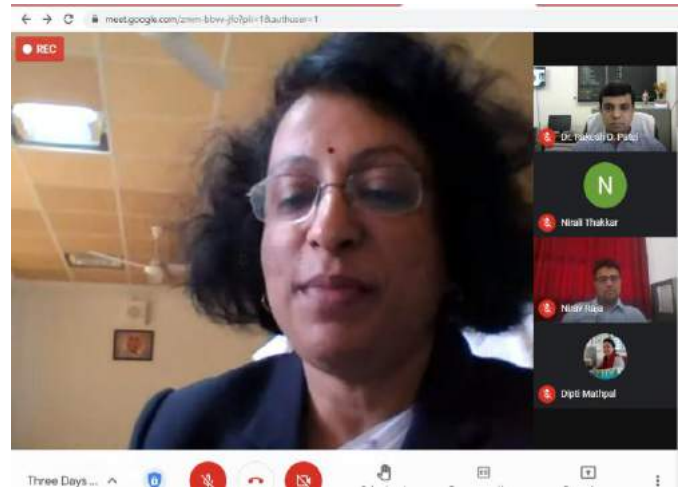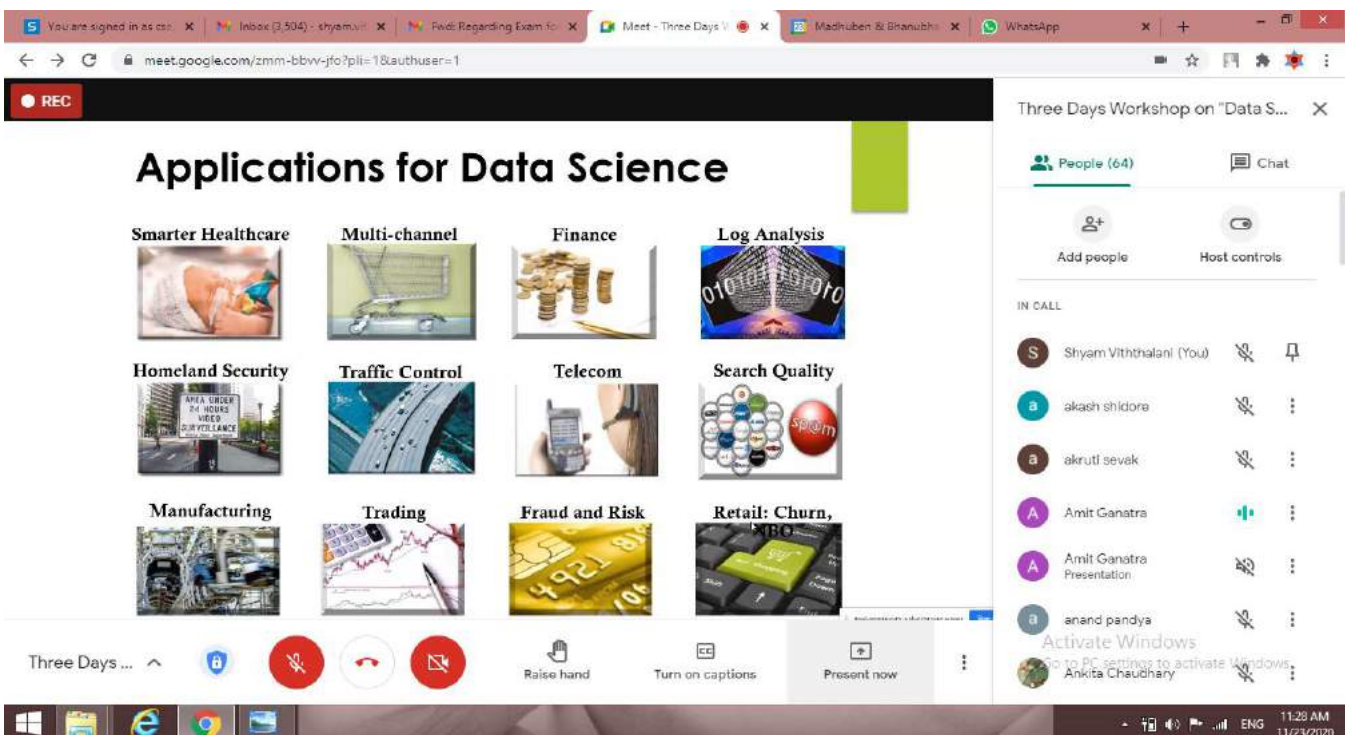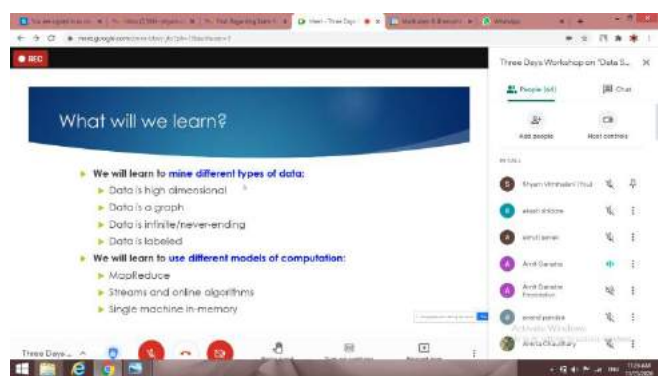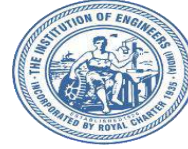
DAY – 1: Session – 1 (23rdNovember, 2020)

Dr. Amit Ganatra, Dean, FTE and Principal, DEPSTAR, CHARUSAT, Changa conducted session on 23rd November 2020 during 10:30 AM to 12:00 PM. He delivered a talk on **Introduction of Data Science and its Applications.**

He nicely explained about data science introduction and its application. He enlighten the session by explaining about data science as this field has become a fundamental discipline, both in the area of basic research and in the resolution of applied problems, where statistics and computer science intersect. Thus, from the perspective of the data, machine learning, operation research, methods and algorithms, and data mining techniques are aligned to address new challenges characterized by the complexity, volume and heterogeneous nature of data.

DAY – 1 : Session – 2 (23rdNovember,2020)

Dr. Pooja Jain, Assistant Professor, Department CS & Engineering, IIT Nagpur conducted session on 23rd November 2020 during 1:00 PM to 03:00 PM. She delivered a talk on **Hands on Session using Python for Data Science.**

The Data Science with Python provides a complete overview of Data Analytics tools and techniques using Python. Learning Python is a crucial skill for many Data Science roles. In this session expert discussed Acquiring knowledgein Python will be the key to unlock your career as a Data Scientist. It also included the concepts of Machine Learning and understand how it's transforming the digital world. An exciting branch of Artificial Intelligence and Machine Learning with data science will help to unlock the power of this emerging field.
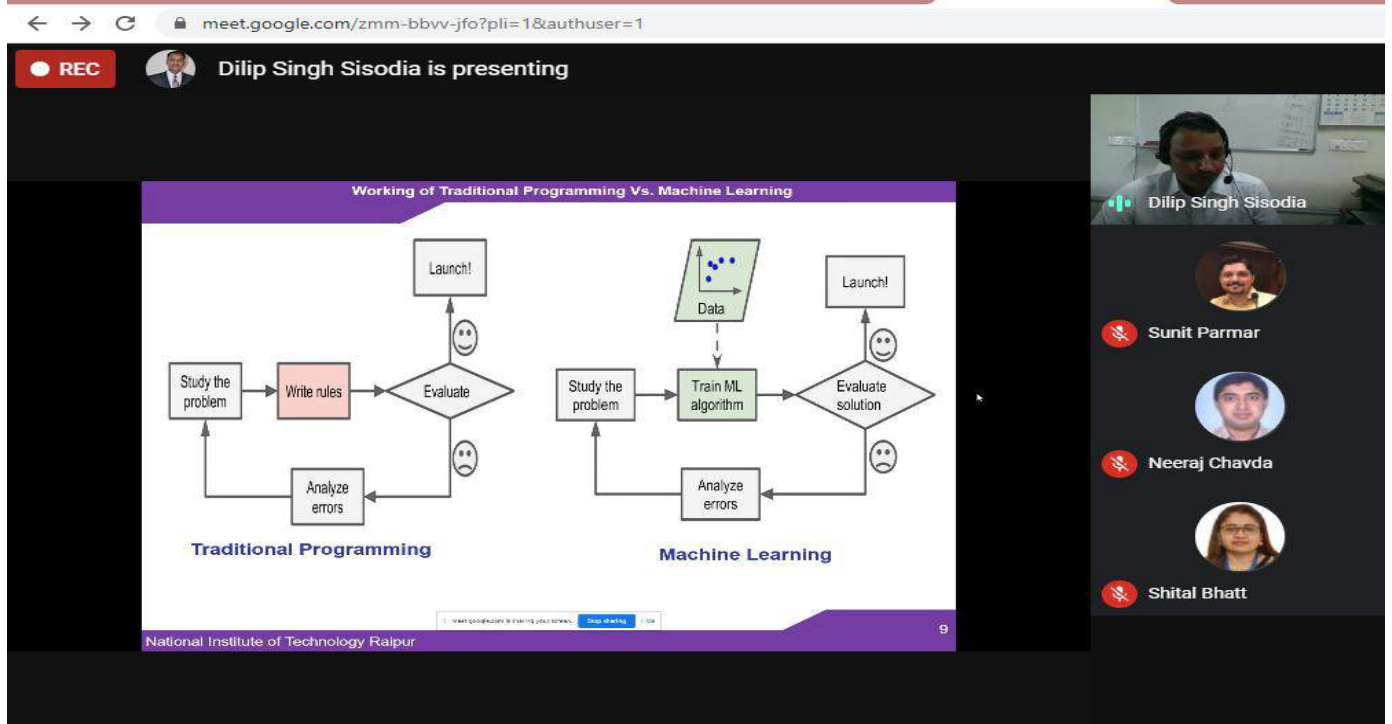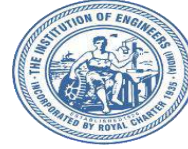
DAY – 2: Session – 1 (24thNovember,2020)

Dr. Dilip Singh Sisodia, Assistant Professor, Department CS & Engineering, NIT Raipur conducted session on 24thNovember 2020 during 10:00 AM to 12:00 PM.
He delivered a talk on **Machine Learning Techniques.**

Machine learning is a hot topic in research and industry, with new methodologies developed all the time. The speed and complexity of the field makes keeping up with new techniques difficult even for experts — and potentially overwhelming for beginners. Session was executed by Different techniques of Machine learning like supervised learning, unsupervised learening, and reinforcement with quite good examples.

Mr. Arshdeep Bahga, Founder & Director, Deep Learn Solutions Pvt. Ltd. conducted session on 24thNovember 2020 during 01:00 PM to 03:00 PM. He delivered a talk on **Big Data & its Applications with Cloud-based Big Data Analytics Stack for Agri-IoT Applications, Real-time Social Media Sentiment Analysis.**

Big Data & its Applications with Cloud-based Big Data Analytics Stack for Agri-IoT Applications, Real-time Social Media SentimentAnalysisBig data platforms have predominantly focused on the volume aspects of large-scale data management. The growing pervasiveness of Internet of Things (IoT) applications, along with their associated ability to collect data from physical and virtual sensors continuously, highlights the importance of managing the velocity dimension of big data too. In this talk, expert delivered the analytics requirements of IoT applications using several practical use cases, characterize the trade-offs between processing latency and data volume capacity of contemporary big data platforms, and discuss the critical role that Distributed Stream Processing and Complex Event Processing systems play in addressing the analytics needs of IoT applications.

DAY – 3 : Session – 1 (25thNovember,2020)

Dr. Shrinivasan K G, (Professor, Dept. of Info. Mgmt. & Coordinator, NITTTR, Chandigarh) conducted session on 25thNovember 2020 during 10:00 AM to 12:00 PM.He delivered a talk on**: Introduction to Deep Learning and its Applications, Research Topics and Industrial Applications in Data Science and Deep Learning.**

Introduction to Deep Learning and its Applications, Research Topics and Industrial Applications in Data Science and Deep LearningDeep learning is a machine learning technique that teaches computers to do what comes naturally to humans learns by example. Deep learning is a key technology behind driverless cars, enabling them to recognize a stop sign, or to distinguish a pedestrian from a lamppost. In this session expert talked about the key to voice control in consumer devices like phones, tablets, TVs, and hands-free speakers. Deep learning is getting lots of attention lately and for good reason. It's achieving results that were not possible before.
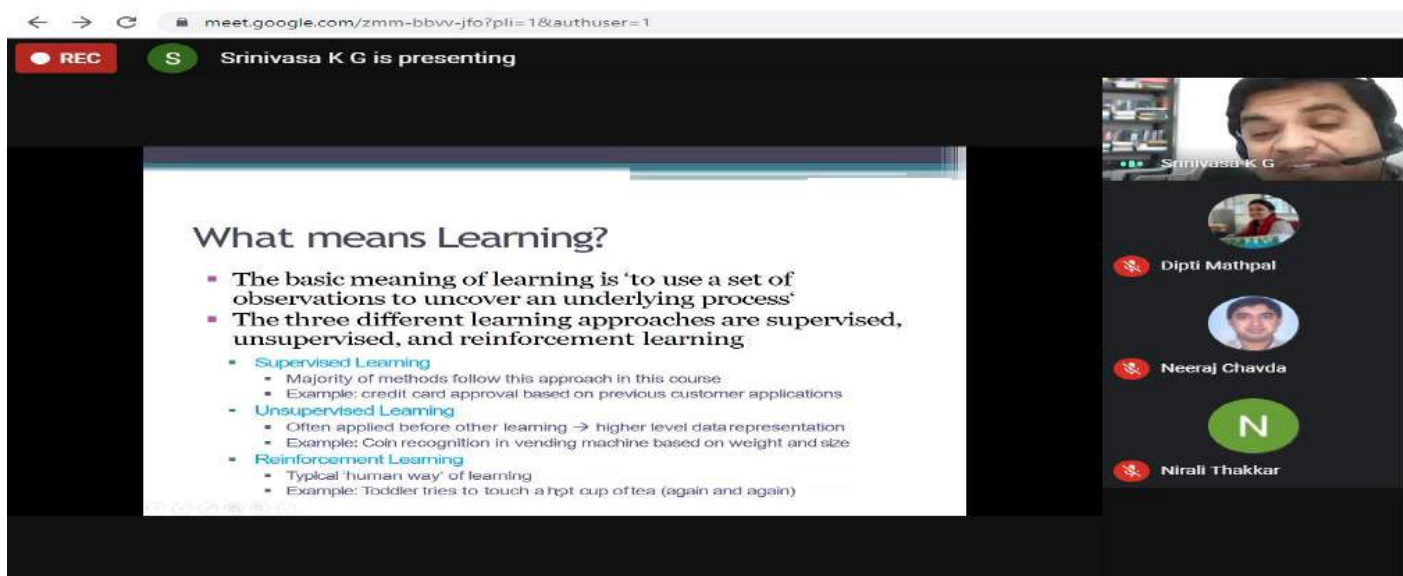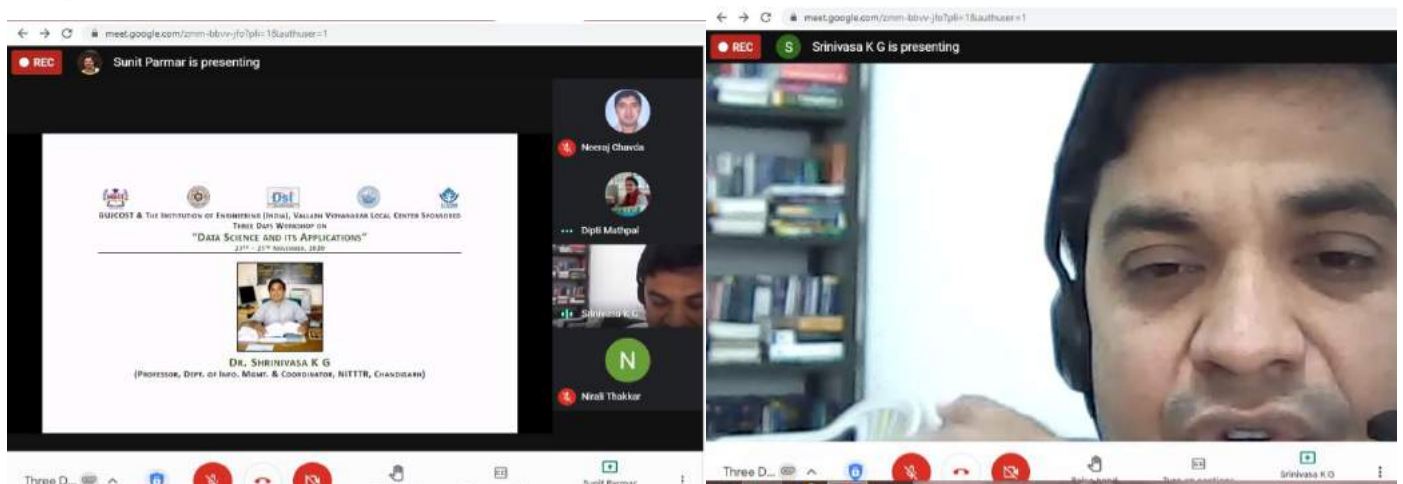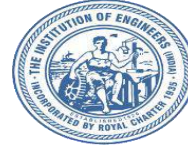
DAY – 3: Session – 2 (25thNovember, 2020)

Mr. Rushbh Doshi, AI/Machine Lead Researcher, APPSIAN conducted session on 25th November 2020 during 01:00 PM to 03:00 PM. He delivered a talk on: **Hands on Session for Deep learning**

In this talk expert explained an introduction to statistical artificial intelligence and deep learning. He also elaborated work done on the deep learning revolution like Speech recognition, image classification and games case stories. He has also explained the basic building block in deep neural network models. He also enlighten on how to perform training on data set with neural network and the stochastic gradient descent methods. And lastly, he has given reinforcement learning example relevant in games, driving and advertisement.
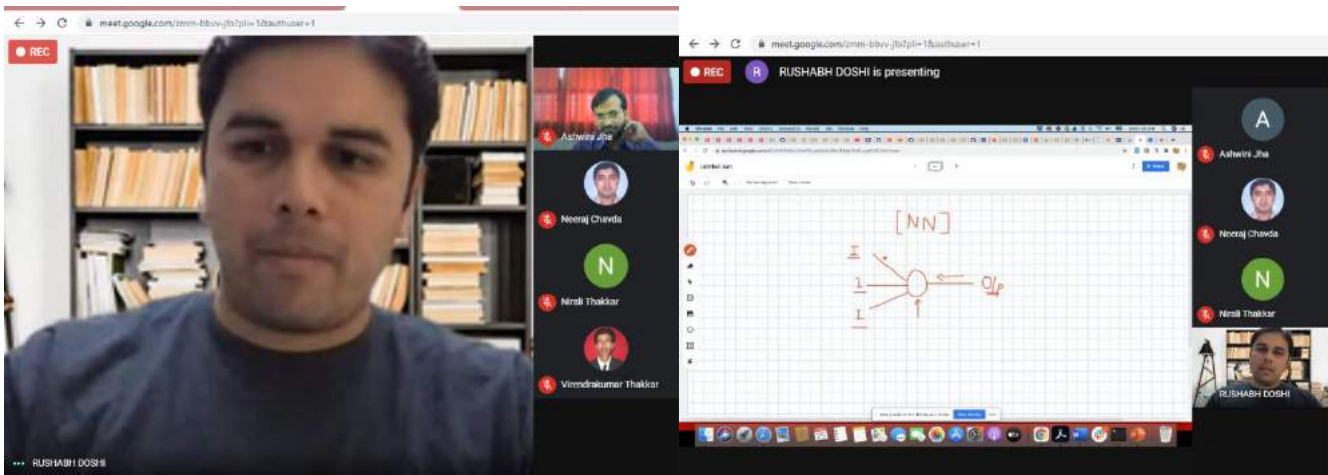
Quiz: The Quiz was taken of 30 marks during 3:00 PM to 4:00 PM based on topics delivered during the all sessions of the workshop.

Organized Team: We are thankful our principal and CVM for providing such opportunity to provide us a platform to conduct such Workshop for the students and gain knowledge in such a pandemic situation. We are also grateful to GUJCOST and The Institute of Engineers (IE), Vallabh Vidyanagar local Center Sponsored for providing financial support for this workshop.

DAY – 3: Feedback (25thNovember,2020)

Feedback:

- Keep doing such type of excellent events. Waiting for an announcement of next event.
- **Maulik Trivedi**

- All the sessions are so useful and wonderful. All the topics were explained so well. All the experts are very knowledgeable. Especially thanks to the management team of this workshop, again thanks to MBIT. Thank you.
- **Rujuta Wadhekar**

- All sessions are knowledgeable. All six sessions are related to the topic and covered major area of data science. Thank you.
- **Virendrakumar Thakkar**

- Thank you MBIT whole team for conducting such a knowledge gathering workshop.
- **Ayaz Ahmed**

- It's very nicely coordinated workshop. Instructions are clear and precise and coming right on time. No interruption at all even though it was organized on online platform
- **Vama soni**