

**Uka Tarsadia University**  
**Chhotubhai Gopalbhai Patel Institute of Technology**  
**Department of Computer Engineering and Information Technology**

**A REPORT ON**  
**Two Days workshop on**  
**“Recent Trends in Data Science”**  
**In Association with**  
**IEEE Signal Processing Society, Gujarat Section**  
**10<sup>th</sup> - 11<sup>th</sup> May, 2018**

<b>Organizing Department</b>	<b>Department of Computer Engineering and Information Technology</b>
<b>Chief Patron</b>	Dr. D. R. Shah
<b>Patron</b>	Dr. N. C. Shah Dr. C. K. Desai
<b>Convener</b>	Ms. Purvi Tandel
<b>Coordinators</b>	Ms. Madhavi Desai Ms. Palak V. Desai
<b>Organising Committee</b>	Mr. Jenish Lavji Ms. Supriya Pati Ms. Divya Patel
<b>Target Audience</b>	Faculties, Research Scholars and MTech students
<b>Total Number of Participants</b>	40
<b>Date of Programme</b>	10 <sup>th</sup> -11 <sup>th</sup> May 2018
<b>Eminent Speakers</b>	Dr. Amit Ganatra, Dr. Chirag Paunwala , Dr. Jaishree Tailor, Dr. Mehul Raval, Dr. Narendra Chauhan, Mr. Hiren Galiyawala

## **SCHEDULE:**

### **Day 1**

<b>Sr. No.</b>	<b>Time</b>	<b>Session Detail</b>	<b>Venue</b>
<b>1</b>	9:00 am to 9:30 am	<b>Registration and Breakfast</b>	D-Point, Maliba Pharmacy College
<b>2</b>	9:30am to 9:45 am	<b>Inauguration</b>	IBM Lab, Maliba Pharmacy College
<b>3</b>	9:45 am to 11:30 am	Expert Session- I [Dr. Narendra Chauhan] Overview of Data science and its fields, Insight of Recommendation Systems	IBM Lab, Maliba Pharmacy College
<b>4</b>	11:30 am to 12:15 pm	<b>Lunch Break</b>	Mesh Canteen
<b>5</b>	12:15 pm to 2:00 pm	Expert Session- II [Dr. Chirag Paunwala] Pattern Recognition and its applications	IBM Lab, Maliba Pharmacy College
<b>6</b>	2:00 pm to 2:20 pm	<b>High-Tea</b>	D-Point, Maliba Pharmacy College
<b>7</b>	2:20 pm to 3:30 pm	Expert Session- III [Dr. Jaishree Tailor] Hands-On: Exploration of Data Science application with R programming	IBM Lab, Maliba Pharmacy College

### **Day 2**

<b>Sr. No.</b>	<b>Time</b>	<b>Session Detail</b>	<b>Venue</b>
<b>1</b>	9:30 am to 10:30 am	Expert Session- III [Dr. Jaishree Tailor] Hands-On: Exploration of Data Science application with R programming	IBM Lab, Maliba Pharmacy College
<b>2</b>	10:30 am to 10:45 am	<b>Breakfast</b>	D-Point, Maliba Pharmacy College
<b>2</b>	10:45am to 12:45 am	Expert Session- IV [Dr. Amit Ganatra] Machine Learning Tools and Techniques	IBM Lab, Maliba Pharmacy College
<b>3</b>	12:45 am to 1:30 pm	<b>Lunch Break</b>	Mess Canteen
<b>4</b>	1:30 pm to 3:30 pm	Expert Session- V [Dr. Mehul Raval] Insight of Deep learning with its application	IBM Lab, Maliba Pharmacy College
<b>5</b>	3:30 pm to 3:45 pm	<b>High-Tea</b>	D-Point, Maliba Pharmacy College
<b>6</b>	3:45 pm to 4:30 pm	Expert Session- VI [Mr. Hiren Galiyawala] Exploration of application in Deep learning	IBM Lab, Maliba Pharmacy College
<b>7</b>	4:30 pm to 4:45 pm	<b>Valedictory</b>	IBM Lab, Maliba Pharmacy College

## **DETAILS OF THE WORKSHOP:**

Computer Engineering and Information Technology Department of Chhotubhai Gopalbhai Patel Institute of Technology, Uka Tarsadia University had organized Two Days workshop on “Recent Trends in Data Science” in association with IEEE Signal Processing Society, Gujarat Section on 10th -11th May 2018.

The workshop was started with an inauguration function at IBM Lab, Maliba Pharmacy College. The aim of this workshop is to make the researchers aware about current research trends in the fields of Data Science with its application. This workshop will provide a platform to learn new tools and explore various application areas of Data Science under the guidance of eminent experts working in these fields.

**Session I:** Overview of Data science and its fields, Insight of Recommendation Systems

**Expert of the session:**

**Dr. Narendra Chauhan**

**[Professor, A. D. Patel Institute of Technology, Anand]**

Dr. Narendra Chauhan was the key note speaker of the workshop. He had discussed basics of Data Science and its various fields where the research is going. Later he had enlighten participants regarding field of recommendations, its type and applications.

**Session II:** Pattern Recognition and its applications

**Expert of the session:**

**Dr. Chirag N. Paunwala**

**[Professor, Sarvajani College of Engineering and Technology, Surat]**

Dr. Chirag Paunwala had first make everyone aware about what the importance of research is and how it can be carried out. He had discussed about IEEE chapters and IEEE membership benefits for a researcher. After giving clarity to pattern recognition, he has discussed research scope of many applications in-general of domain and enlighten pattern recognition domain by biometric for authentication application in detail.

**Session III:** Exploration of Data Science application with R programming (Hands-On)

**Experts of the session:**

**Dr. Jaishree Tailor**

**[Assistant Professor, Shrimad Rajchandra Institute of Management and Computer Application, Bardoli]**

R programming is one the most used language for data mining and machine learning algorithms. In the hands-on session, Dr. Jaishree Tailor had taken one sample dataset for an application and shown how data can be cleaned, which different library functions can be used and how result can be visualized using different graphs.

#### **Session IV: Machine Learning Tools and Techniques**

##### **Expert of the session:**

**Dr. Amit Ganatra**

**[Professor, Charotar University of Science and Technology, Changa]**

Dr. Amit gantra had discussed about various applications and techniques of machine learning. He made participants aware about various tools of machine learning which includes Neural plus, Elyuda, Orange and Weka. He had also discussed with particular application which tool can be more suitable and how to use that tool.

#### **Session V: Insight of Deep learning with its application**

##### **Expert of the session:**

**Dr. Mehul Raval**

**[Associate Professor, School of Engineering and Applied Science, Ahmedabad]**

Nowadays, deep learning can be treated as the most significant breakthrough in the field of pattern recognition and machine learning, has greatly affected the methodology of related fields like pattern classification and regression in both academia and industry. One of the aim of this workshop was to provide insights of pattern recognition with and without use of deep learning. Experts of the session IV on 11<sup>th</sup> May 2018, Dr. Mehul Raval, gave the insight of Deep learning with its application. He also provided an exploration of application in Deep learning using Python.

#### **Session VI: Exploration of application in Deep learning**

##### **Expert of the session:**

**Mr. Hiren Galiyawala**

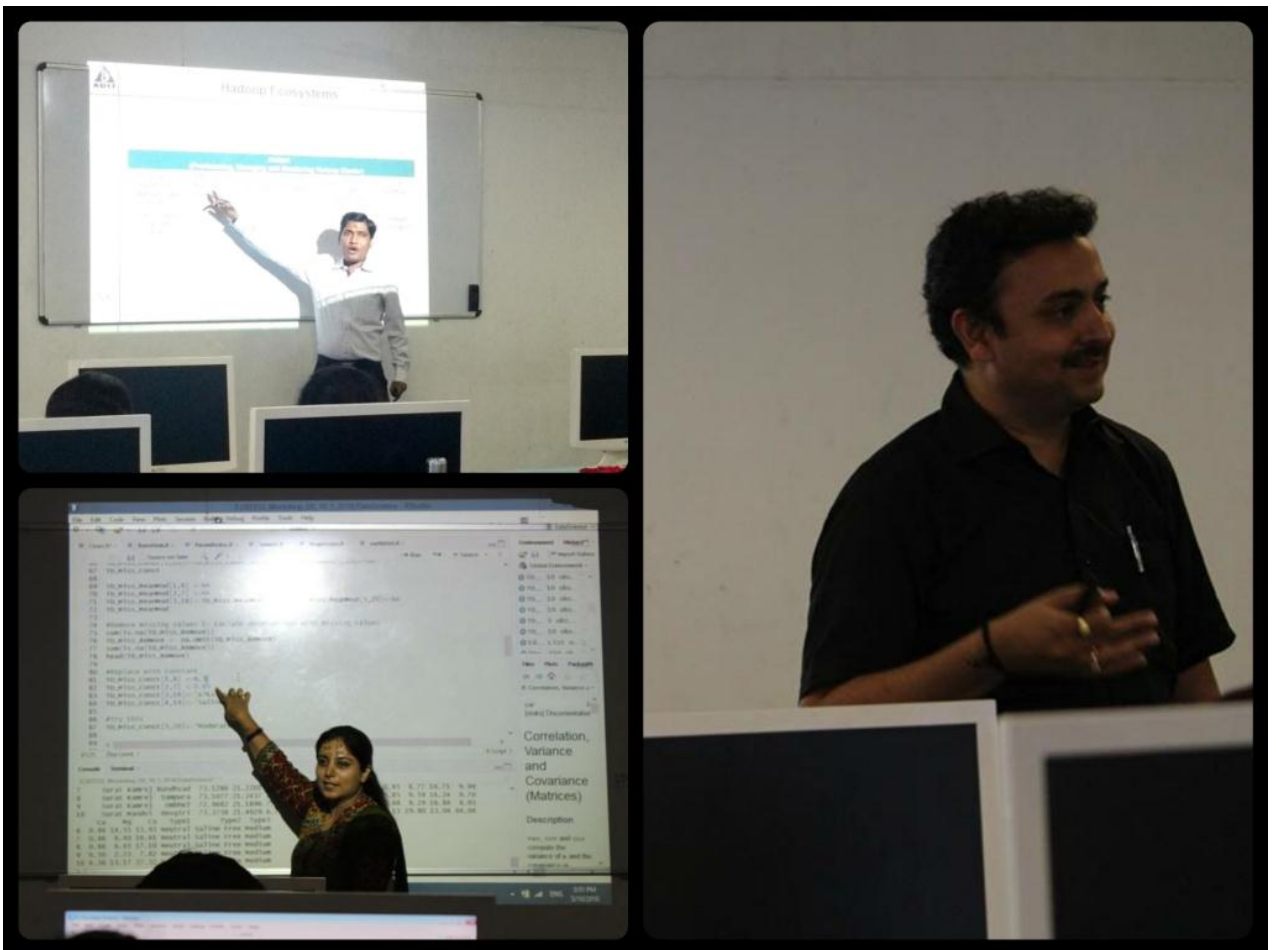
**[Ph.D. research scholar, School of Engineering and Applied Science, Ahmedabad]**

Along with Dr. Mehul Raval, Mr Hiren Galiyawala had taken session on the applications of deep learning using libraries in Python such as numpy, scipy, matplotlib, pandas, scikit-learn, scikit-image, opencv, tensorflow, keras, theano. The session provided a glimpse of how to plot a graph using matplotlib in keras for mnist dataset and create a simple MLP using keras in Python.

**GLIMPSE OF THE WORKSOP:**

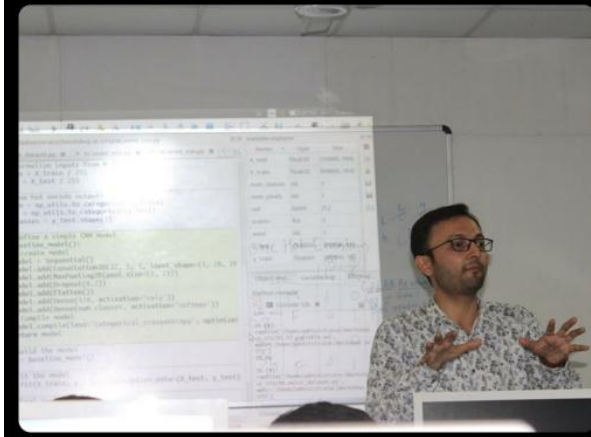


**[Inauguration]**

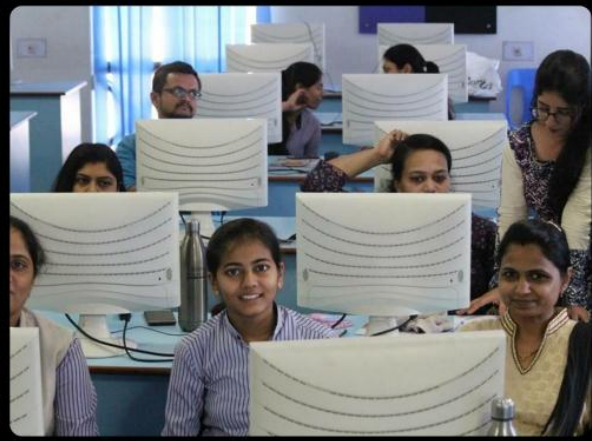


**[Day 1 Sessions]**





[Day2 Sessions]



[Participants during workshop]



**[Participants and committee members of workshop]**