



SHRI VILE PARLE KELAVANI MANDAL'S  
**Institute of Technology, Dhule**

Approved by AICTE New Delhi | Affiliated to DBATU, Lonere

**Department of Electrical Engineering**

Academic Year 2022-23

**FDP on “Big Data applications to Electrical Engineering”**




<b>Objective</b>	<p>To motivate researchers towards the upcoming area of big data in electrical engineering. To discuss the following areas of research with participants:</p> <ol style="list-style-type: none"><li>1. Introduction to IoT and AI.</li><li>2. Indoor Air Pollution Monitoring - IoT Case Study</li><li>3. Loading &amp; Understanding Data with Statistics</li><li>4. Understanding Data with Visualization</li><li>5. Preparing &amp; Pre-Processing Data (Numerical &amp; Categorical)</li><li>6. Feature Analysis &amp; Selection</li><li>7. Theoretical Introduction to ML Algorithms</li><li>8. Building a Classification Model from Scratch with Data</li><li>9. Building a Regression Model from Scratch with Data</li><li>10. Prospective of Power Quality Improvement studies in Typhoon HIL- DVR Example</li><li>11. Case Studies on Deep Learning &amp; Big Data</li></ol>
<b>Organizer</b>	Department of Electrical Engineering SVKM's Institute of Technology, Dhule
<b>Participating Class &amp; Division</b>	Faculty from Electrical Engineering of various colleges.
<b>Date</b>	20/02/2023 to 24/02/2023 (One Week)
<b>Time</b>	10:00 AM to 4:00 PM
<b>Venue</b>	Online – Microsoft Teams
<b>Coordinator/s</b>	Mr. Sandeep Ushkewar <b>Organizing Team:</b> Mr. Gaurav Patil, Dr. Namra Joshi, Mr. Jagdish More, Ms. Farha Naz, Mr. T. M. Shubham, Mr. Shahid Akhtar, Dr. M. Ankush Kumar, Mr. Rahul Thakur, Mr. Jayesh Patil, Mr. Pankaj Bhavsar.
<b>Name of Speaker with Designation</b>	<ol style="list-style-type: none"><li>1. Dr. Shimi S.L, Assistant Professor, NITTTR Chandigarh</li><li>2. Dr Lini Mathew, Professor, NITTTR Chandigarh</li><li>3. Dr. Jagriti Saini, Founder Eternal RESTEM, Sunder Nagar, HP</li></ol>



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<b>Brief report on activity</b>	• The FDP was conducted in below sequence.			
	DAY & DATE	Live Session - 1 10.00 AM to 11. 30 AM	Live Session - 2 12.00 PM to 1.30 PM	Live Session - 3 2.30 PM to 4.00 PM
	Monday 20/02/2023	Course Inauguration & Introduction to Big Data Analytics (SSL/JS)		Introduction to IoT and AI (JS)
	Tuesday 21/02/2023	Indoor Air Pollution Monitoring - IoT Case Study (JS)	Loading & Understanding Data with Statistics (JS)	Understanding Data with Visualization (JS)
	Wednesday 22/02/2023	Preparing & Pre-Processing Data (Numerical & Categorical) (JS)	Preparing & Pre-Processing Data (Numerical & Categorical) (JS)	Feature Analysis & Selection (JS)
	Thursday 23/02/2023	Theoretical Introduction to ML Algorithms (JS)	Building a Classification Model from Scratch with Data (JS)	Building a Regression Model from Scratch with Data (JS)
Friday 24/02/2023	Case Study 1: Deep Learning & Big Data (JS)	Case Study 2: Deep Learning & Big Data (JS)	STC Valediction (SSL/LM)	
<b>Duration of Program</b>	One Week			
 <b>Mr. Sandeep Ushkewar</b> Coordinator	 <b>Dr. Vishal Moyal</b> Department Coordinator	 <b>Dr. Nilesh Salunke</b> Principal & Patron		



**Attached:-**

1. Details of the Event
2. Event Memories/Pictures
3. List of Participants
4. Sample Certificate

# 1. Details of the Event

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**Name of Program:** FDP on “Big Data applications to Electrical Engineering”.

**Objectives:** To motivate researchers towards the upcoming area of big data in electrical engineering. To discuss the following areas of research with participants:

1. Introduction to IoT and AI.
2. Indoor Air Pollution Monitoring - IoT Case Study
3. Loading & Understanding Data with Statistics
4. Understanding Data with Visualization
5. Preparing & Pre-Processing Data (Numerical & Categorical)
6. Feature Analysis & Selection
7. Theoretical Introduction to ML Algorithms
8. Building a Classification Model from Scratch with Data
9. Building a Regression Model from Scratch with Data
10. Prospective of Power Quality Improvement studies in Typhoon HIL- DVR Example  
Case Studies on Deep Learning & Big Data

**Dates and duration:** 20/02/2023 to 24/02/2023 (One Week)

**Event Coordinator:** Mr. Sandeep Ushkewar

**Convener:** Dr. Vishal Moyal.

**Patron:** Dr. Nilesh Salunke

**Organizing Team:** Mr. Gaurav Patil, Dr. Namra Joshi, Mr. Jagdish More, Ms. Farha Naz, Mr. T. M. Shubham, Mr. Shahid Akhtar, Dr. M. Ankush Kumar, Mr. Rahul Thakur, Mr. Jayesh Patil, Mr. Pankaj Bhavsar.

**Participants:** Faculty from Electrical Engineering Department (Only from SVKM’s IOT, Dhule)

**Name and details of the speakers:**

1. Dr. Shimi S.L, Assistant Professor, NITTTR Chandigarh
2. Dr Lini Mathew, Professor, NITTTR Chandigarh
3. Dr. Jagriti Saini, Founder Eternal RESTEM, Sunder Nagar, HP

## 2. Event Poster

**ONLINE STC ON  
BIG DATA APPLICATIONS IN  
ELECTRICAL ENGINEERING**

20<sup>TH</sup> TO 24<sup>TH</sup> FEBRUARY 2023

Organized by  
NITTTR, Chandigarh  
Nodal Center  
SVKM's Institute of Technology,  
Dhule

**Expert :Dr. Jagriti Saini  
Eternal RESTEM**

**HANDS ON TRAINING  
COURSE CONTENT**

- Introduction to Big Data Analytics and AI
- Real world Data aqutation using Indoor Air Pollution Monitoring (Hardware demo)
- Loading & Understanding Data with Statistics
- Understanding Data with Visualization
- Preparing & Pre-Processing Data (Numerical & Categorical)
- Feature Analysis & Selection
- Theoretical Introduction to ML Algorithms
- Building a Classification Model from Scratch with Data
- Building a Regression Model from Scratch with Data
- Case Study 1: Deep Learning & Big Data
- Case Study 2: Deep Learning & Big Data

**REGISTER VIA LINK**  
<https://fdp.nitttrchd.ac.in/backingup/>

**CONTACT US**  
Dr. Vishal Moyal, HOD, EE  
SVKM's Institute of Technology, Dhule  
Mobile: 9425685966  
E-Mail: Vishal.Moyal@svkm.ac.in  
Mr. Sandeep Ushkewar, AP, EE  
Mobile: 9970045518  
E-Mail: Sandeep.Ushkewar@svkm.ac.in

The applicants have to pay the course fee Rs.118 (Faculty and Technical staff) or Rs 590 (Research scholars) for each course they apply.



### 3. Event Memories/ Pictures



### 3. List of Participants

**Attendance**  
 Name of the Course: Big Data Applications in Electrical Engineering (ICT-172)  
 Dates: 20/02/2023 to 24/02/2023  
 Venue (Nodal Centre) : SVKM's Institute of Technology, Dhule, Maharashtra

Sr. No.	Name of the Participant	Name of the Institute	20/02/2023		21/02/2023		22/02/2023		23/02/2023		24/02/2023	
			09.30 am-11.00 am	11.30a m-1.00pm	09.30 am-11.00 am	11.30a m-1.00pm	09.30 am-11.00 am	11.30a m-1.00pm	09.30 am-11.00 am	11.30a m-1.00pm	09.30 am-11.00 am	11.30a m-1.00pm
1	AKSHAY BHARAT JAIN	SVKM's Institute of Technology, Dhule.										
2	AMIT SOLANKI	SND COE & Research Center, Yeola.										
3	DR NILESH SALUNKE	SVKM's Institute of Technology, Dhule.										
4	DR. TUSHAR RAGHUNATH SHINDE	SVKM's Institute of Technology, Dhule.										
5	FARHA NAZ	SVKM's Institute of Technology, Dhule.										
6	JAYESH NANA PATIL	SVKM's Institute of Technology, Dhule.										
7	M. ANKUSH KUMAR	SVKM's Institute of Technology, Dhule.										
8	MADHURI RAVINDRANATH TAYADE	VJTI, Matunga, Mumbai										
9	MAKARAND SHAHADE	SVKM's Institute of Technology, Dhule.										
10	NADDEEM AKHTAR	R.C. Pael Institute of Technology, Shirpur.										
11	NAMRA JOSHI	SVKM's Institute of Technology, Dhule.										
12	PANKAJ NAVANITLAL BHVSAR	SVKM's Institute of Technology, Dhule.										
13	PRAJAKTA DESHBHARAT	VJTI, Matunga, Mumbai										
14	RAHUL MANOHAR THAKUR	SVKM's Institute of Technology, Dhule.										
15	RENU TAKWALE	VJTI, Matunga, Mumbai										
16	SANDEEP SUNIL USHKEWAR	SVKM's Institute of Technology, Dhule.										
17	SHAHID AKHTAR IQBAL AHMED	SVKM's Institute of Technology, Dhule.										
18	SHUBHAM DNYANOBA KAMBLE	VJTI, Matunga, Mumbai										
19	SONAL GEDAM	VJTI, Matunga, Mumbai										
20	SUNITHA PREMAKUMAR	VJTI, Matunga, Mumbai										
21	T M SHUBHAM	SVKM's Institute of Technology, Dhule.										
22	VISHAL MOYAL	SVKM's Institute of Technology, Dhule.										
23	YOGESH EKNATH WANKHEDE	VJTI, Matunga, Mumbai										




*Signature*  
 [ Pencil ]

*Signature*  
 [ Local Program Coordinator ]



## 4. Sample Certificate


Certificate No: ICT-23890/23



**National Institute of  
Technical Teachers Training and Research  
Chandigarh**

MINISTRY OF EDUCATION, GOVERNMENT OF INDIA

**Certificate**



*This is to certify that*

**SANDEEP SUNIL USHKEWAR**

**SVKMS INSTITUTE OF TECHNOLOGY, DHULE  
MAHARASHTRA**

*Participated in the AICTE Recognized Faculty Development Programme*

on

**Big Data Applications in Electrical Engineering**

*Conducted by*


**Electrical Engineering Department**

from

**20/02/2023 to 24/02/2023 (One Week)**

at

**SVKMs Institute of Technology, Dhule Maharashtra**



*Shani S.L.*  
**Coordinator**

*[Signature]*  
**Director**