



# LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

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## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

### *Summary Report on Three Day Online Faculty Development Program on "Recent Trends in COMPUTER VISION" (17<sup>th</sup> June 2021 – 19<sup>th</sup> June 2021)*

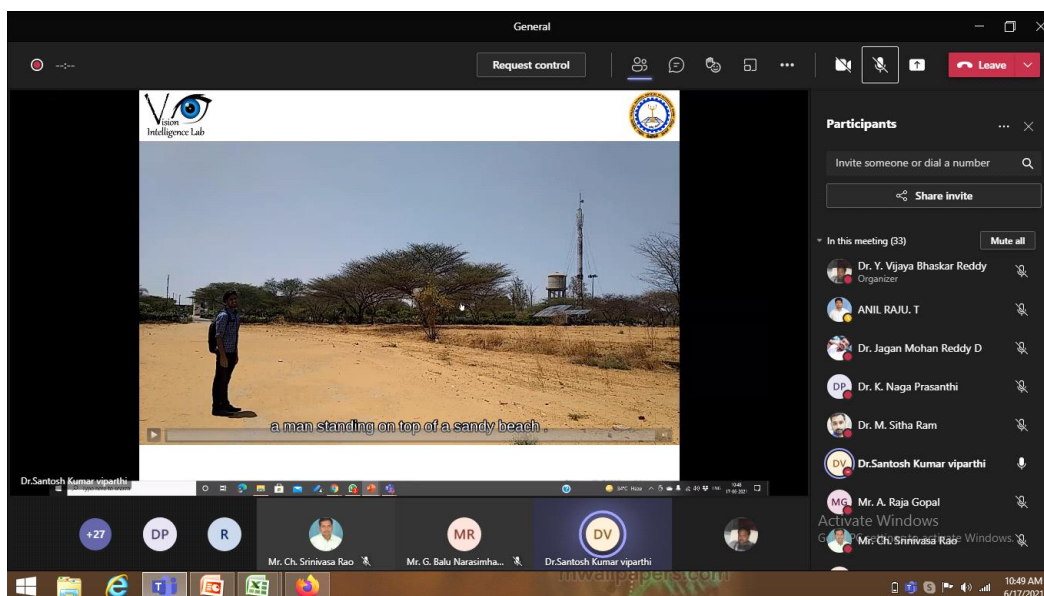
Lakireddy Bali Reddy College of Engineering (A) has organized A Three-Day Online Faculty Development Programme on "**Recent Trends in Computer Vision**" from **17<sup>th</sup> June–19<sup>th</sup> June 2021**. This training program was organized by Department of CSE and has received an overwhelming response with more than 200 registrations. Out of them, we have shortlisted only 120 participants from various prestigious institutes like IITs, NITs and State Universities. Participants constitute a good mixture of Faculty, research scholars and PG students.

#### **Day 1 -- Session1 (17/06/2021)**

The first session of the FDP is handled by **Dr.Santosh Kumar Vipparthi**, Assistant Professor. MNIT, Jaipur. In this session the speaker has provided a brief introduction about Computer Vision, Neural Network architecture and image Processing. He had explained Introduction to Computer Vision, Neural Network Architecture and CNN.

#### **Topics Covered in the Session:**

- Introduction to Computer Vision
- Neural Network architecture.
- CNN.



*Day1 Session1 Presentation by speaker Dr. Santosh Kumar Vipparthi.*

## Day1-- Session2 (17/06/2021)

This session is handled by **Dr. Santosh Kumar Vipparthi**, Assistant Professor, MNIT, Jaipur. In this session the speaker presented a brief introduction to Neural Networks, Convolution Neural Networks (CNN), Deep Learning, and Application of Deep learning. Pictorially he explained how a CNN could be useful for classifying, how CNN's are represented, what are different layers in CNN how each layer is processed.

### Topics Covered in the session:

- Neural Networks.
- Convolution Neural Networks.
- Hand-On for classifying Cat and Dog by using CNN.
- Deep Learning Applications.
- Computer Vision algorithms.

The screenshot shows a Zoom meeting interface. The main content is a presentation slide from the Vision Intelligence Lab. The slide displays a 5x10 grid of handwritten digits from 0 to 9. The digits are written in various styles and colors (blue, green, red). A red box highlights a question on the slide: "What features might you expect a good NN to learn, when trained with data like this?". The slide also includes a caption: "Figure 1.2: Examples of handwritten digits from U.S. postal envelopes." The meeting chat on the right shows several messages, including "excellent sir" and "EXCELLENT SESSON SIR". The meeting controls at the bottom show the speaker is Dr. Santosh Kumar Vipparthi.

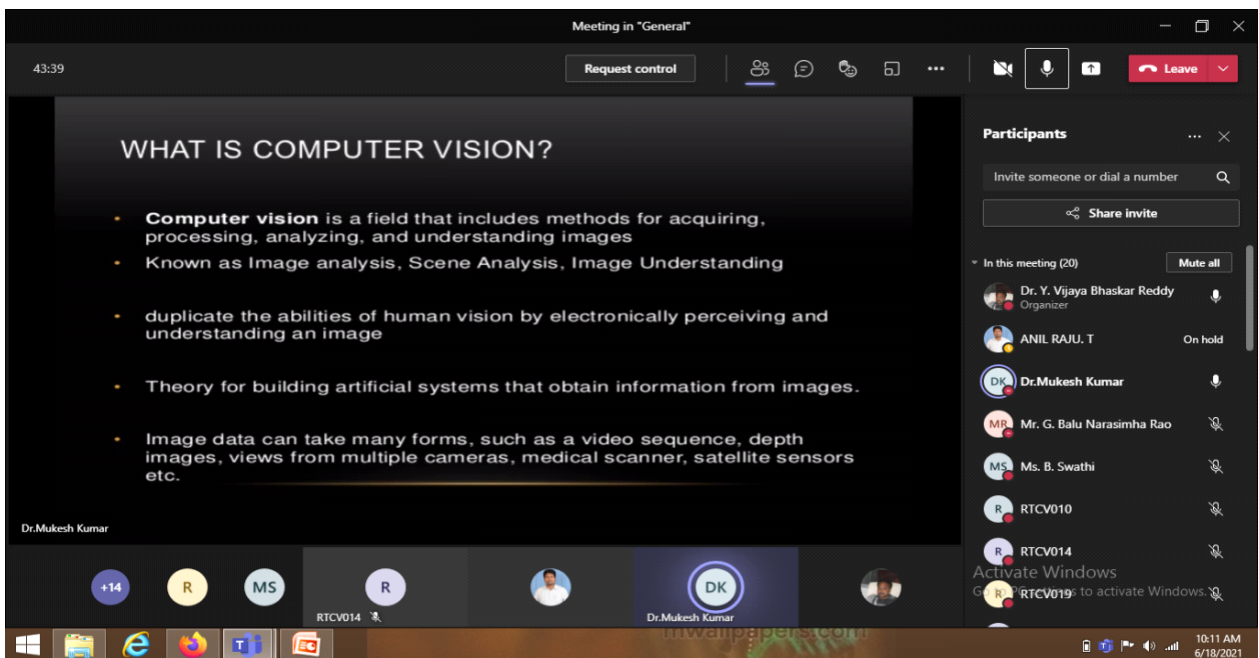
*Day1 Session2 Presentation by speaker Dr. Santosh Kumar Vipparthi.*

## Day 2 --Session1 (18/06/2021)

This session is handled by **Dr. Mukesh Kumar**, Assistant Professor, NIT Patna. The speaker discussed about Computer Vision basics, applications and Feature Extraction.

### Topics Covered in the Session:

- Computer Vision Basics
- Applications of Computer Vision.
- Feature extraction.



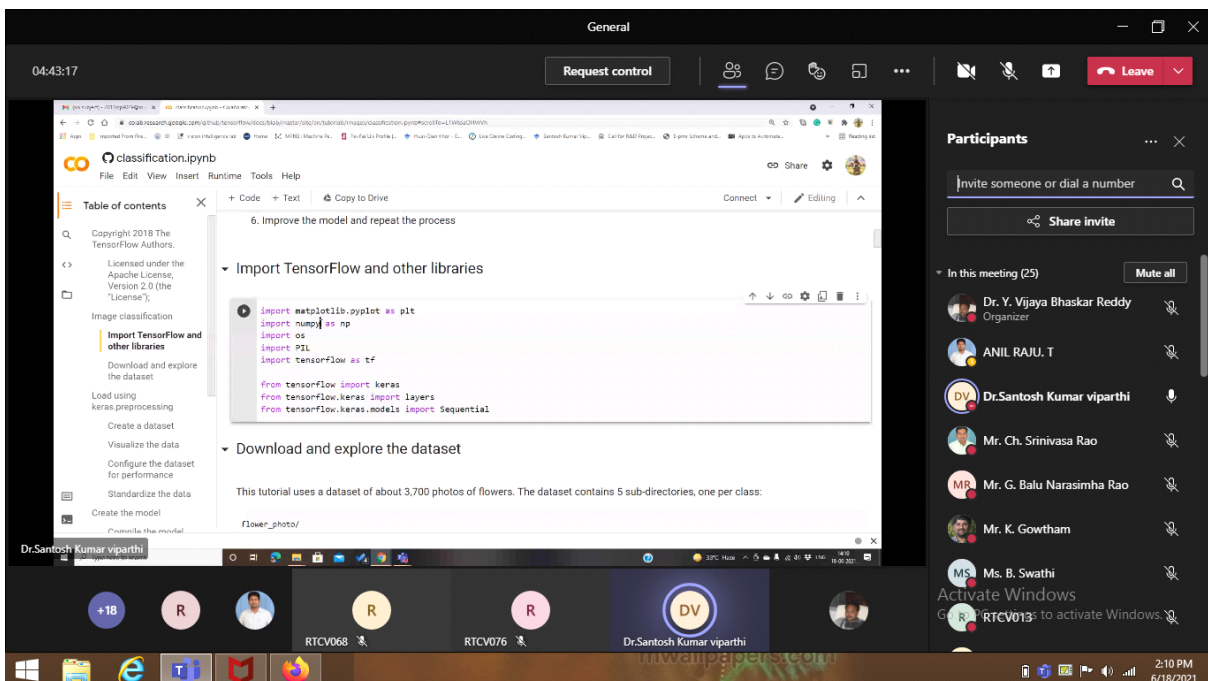
*Day2 Session1 Presentation by speaker Dr. Mukesk Kumar*

## Day2 --Session2 (18/6/2021)

This session is handled by **Dr.Santosh Kumar Vipparthi**, Assistant Professor. MNIT, Jaipur. The speaker demonstrated Hands-on session on tensor-flow to handle feature extraction, Object recognition and Object Detection Mechanism.

### Topics covered in the session:

- Hands-on session on Tensor Flow
- Object Detection and Recognition
- RNN



*Day2 Session2 Presentation by speaker Dr. Santosh Kumar Vipparthi.*

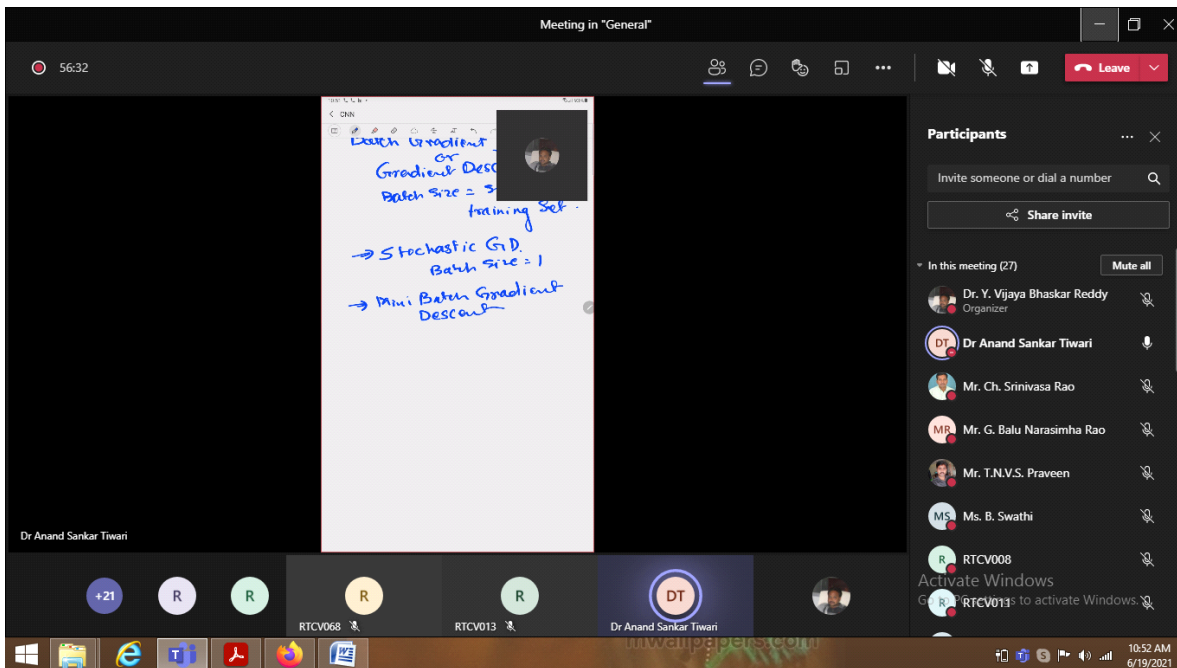
## Day3-- Session1 (19/6/2021)

This session is taken by **Dr. Anand Shanker Tiwari**. Assistant Professor, NIT Patna.

The speaker started the session with CNN and Applications of CNN.

### Topics covered in the session:

- CNN
- Applications of CNN.

A screenshot of a Zoom meeting interface. The main window displays a presentation slide titled "CNN" with handwritten notes in blue ink. The notes include: "Batch Gradient Descent or Gradient Descent", "Batch size = 3", "Training Set", "→ Stochastic Gr.D. Batch size = 1", and "→ Mini Batch Gradient Descent". The meeting controls at the bottom show a grid of participants, with Dr. Anand Sankar Tiwari (DT) in the center. The system tray at the bottom indicates the time is 10:52 AM on 6/19/2021.

*Day3 Session1 Presentation by speaker Dr. Anand Shanker Tiwari*

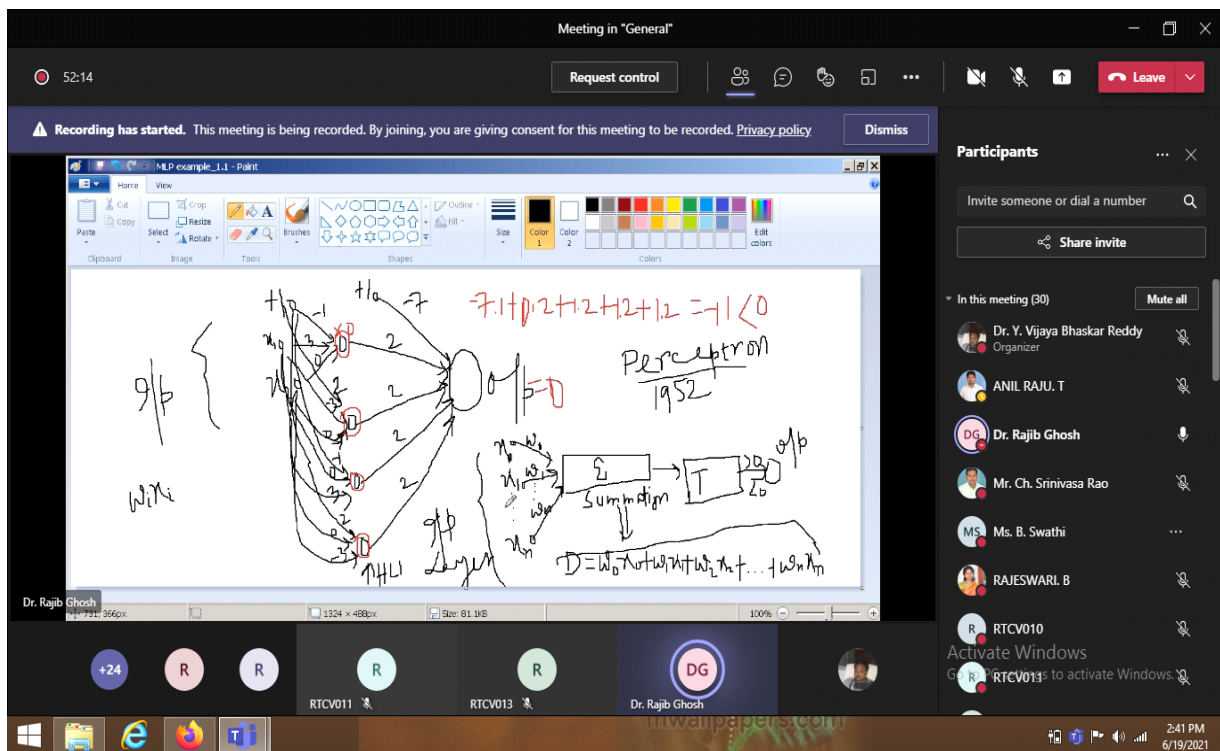
## Day3 --Session 2 (19/6/2021)

This session is taken by Dr. **Dr. Rajib Ghosh**. Assistant Professor, NIT Patna. The session covered CNN and role of Bayesian, Neural and feed-forward networks and RNN.

### Topics Covered in the session:

- Neural Network architecture
- Feed-forward network.
- Bayesian Network.
- RNN.





*Day3 Session 2 Presentation by speaker Dr. Rajib Ghosh*

### Valedictory Session:

On the Valedictory Session, Dr. D.Veeraiah, Professor, HOD CSE Department and Convener of FDP joined the session as a Chief Guest along with the resource persons Dr. Santosh Kumar Vipparthi, Dr. Mukesh Kumar, Dr. Anand Shanker Tiwari, Dr.Rajib Ghosh, and Coordinators of FDP Dr.Y.Vijay Bhaskar Reddy, and Dr.D.Jagan Mohan Reddy Associate Professor, CSE Department.

Dr. D. Veeraiah, Professor and HOD, CSE Department, in his valedictory addressing, thanked every participant for spending their valuable time and attending 3 day FDP. Also congratulated the Program coordinators Dr. Y.Vijay Bhaskar Reddy, Dr. D. Jagan Mohan Reddy and co-coordinators Mr. G.Balu Narasimha Rao, Mr. K.Sundeep Saradhi and Ch. Srinivasa Rao. for organizing the FDP in a successful manner.

Further, he appreciated all the Teaching and Non-Teaching Staff Members of CSE Department for promoting such kind of programme for the faculties who attended from all over India. At the end of the valedictory session, vote of thanks was given by Dr.Y.Vijay Bhaskar Reddy, Coordinator of the FDP in which he has been paid his gratitude towards all the participants who has spared their valuable time for attending this FDP. He also expressed the gratitude to the Resource Persons, Dr. Santosh Kumar Vipparthi, Dr. Mukesh Kumar, Dr. Anand Shanker Tiwari, and Dr.Rajib Ghosh for giving their valuable time for our participants and sharing their knowledge to them.

Nevertheless, he expressed his sincere thanks to Sri. G. Srinivasa Reddy, President, Dr. K. Appa Rao, Principal and Dr. D. Veeraiah, HOD, CSE Department.

“We are highly thankful to the Management, Principal and Head of the Department for giving us an opportunity to organize this FDP in our campus and hope we will find the support in future also for organizing such kind of activities.”

**Coordinator**  
**(Dr.Y.V.Bhaskar Reddy)**

**Convener**  
**(Dr. D. Veeraiah)**

**Principal**  
**(Dr. K. Appa Rao)**