Vishnu Waman Thakur Charitable Trust's

VIVA Institute of Technology

Approved by AICTE New Delhi, Recognized by DTE, Govt. of Maharashtra
And Affiliated to University of Mumbai

NAAC "B++" Grade

Department of Electronic & Telecommunication Engineering

Topic Name:	**Advance computer vision**
Name of the Guest Speaker:	**Madhura Ranade**
Designation:	**Professor and Head of Department**
Organization/Institution:	**Viva Institute of Technology**
Date:	**20/02/2025**
Time:	**11:00pm to 1:00pm**
Number of Students:	**35**
Programme summary:	**The lecture was organized and scheduled under the IETE**

Student forum:

Guest speaker Madhura Ranade took the session about python.Where she interestingly taught us about object detection using YOLO. A brief idea about how Google colab is done using python code and image recognization is done also how to change image from gray scale to gaussian to median to edge with the help using colab.Also taught about low pass and high pass filter of image . It was an offline session . She ended the session by solving the doubts of the students. It was very helpful session because of that we come to know more about colab and python.

Seminar Agenda:

1. **Introduction & Trends –** Overview of modern CV applications and challenges
2. **Deep Learning for CV –** CNNs, Transformers (ViTs), Pretrained Models
3. **Object Detection & Segmentation –** YOLO, Faster R-CNN, Mask R-CNN
4. **Image & Video Processing –** Feature Extraction, Optical Flow, GANs
5. **3D Vision & Multi-View Geometry –** Stereo Vision, SLAM, Point Clouds
6. **Edge AI & Deployment –** Model Optimization, ONNX, TensorRT
7. **Hands-on Projects** – Implementing real-world CV applications
8. **Q&A & Networking –** Discussion, Future Trends, Next Steps

Conclusion:

Advancements in computer vision have revolutionized various industries, including healthcare, automotive, security, and retail. With the integration of deep learning, artificial intelligence, and edge computing, computer vision systems have become more accurate, efficient, and capable of handling complex visual tasks.Despite these advancements, challenges such as data privacy, bias in AI models, and computational costs remain significant concerns. Addressing these issues through ethical AI development and improved algorithms will be crucial for the continued growth of computer vision.Looking ahead, the future of computer vision promises even greater innovations, including real-time image recognition,.

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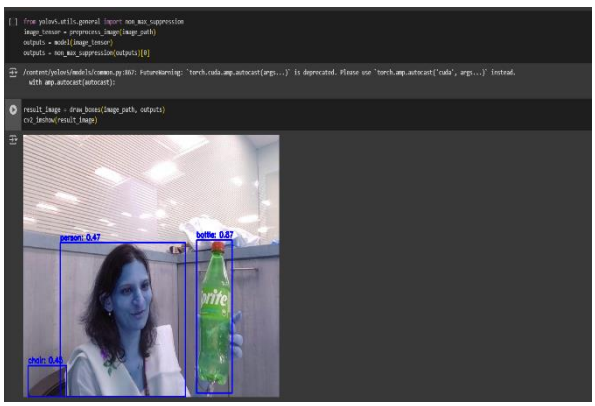
Thanking you,
Student Correspondence
Sanket Gawade.

Photos:


```
from IPython.display import display, Javascript
from google.colab.output import eval_js
from base64 import b64decode

def take_photo(filename='photo.jpg', quality=0.8):
  js = Javascript('''
    async function takePhoto(quality) {
      const div = document.createElement('div');
      const capture = document.createElement('button');
      capture.textContent = 'Capture';
      div.appendChild(capture);

      const video = document.createElement('video');
      video.style.display = 'block';
      const stream = await navigator.mediaDevices.getUserMedia({video: true});

      document.body.appendChild(div);
      div.appendChild(video);
      video.srcObject = stream;
      await video.play();

      // Resize the output to fit the video element.
      google.colab.output.setIframeHeight(document.documentElement.scrollHeight, true);

      // Wait for Capture to be clicked.
      await new Promise((resolve) => capture.onclick = resolve);

      const canvas = document.createElement('canvas');
```



Guest Lecture Attendance

Topic: Advanced Computer Vision

AY 2024-25

Class: SE, TE, BE **Sem:** 4th, 6th, 8th

Sr.No.	Name of the Student	Sign
1)	Harshit Singh	
2)	Siddhesh Vadishwla	
3)	Jayesh Sable	
4)	Yogesh Shukla	
5)	Ganesh Tarde	
6)	Daksh Ghavat	
7)	Darshan Patil	DR. Patil
8)	shruti meher	
9)	Rudra Panchal	
10)	Daksh chavan	

Dr. Madhura Ranade 20/2/25

Guest Lecture Attendance

Topic: Advanced Computer Vision

AY 2024-25

Class: SE, TE, BE **Sem:** 4th, 6th, 8th

Sr.No.	Name of the Student	Sign
11)	Mrunal Tavare	Tavare.
12)	Gayali Bhangne	Gayali
13)	Vikram patil	Patil
14)	Sahil prajapati	Sahil
15)	Bhavik patil	Patil
16)	Khan Shakil	Shakil
17)	Khush Patel	Patel
18)	Vishnu Mishra	Vishnu
19)	Manish Prajapati	MP
20)	Sanket Gawade	Gawade
21)	Tanushri Sawant	T. G. Sawant
22)	Aparna Mandal	AM
23)	Bhavesh Shetty	Shetty
24)	MOMIN MAAZ AHMED	MMaaz

Dr. Madhura Ranade MR 20/2/25