



**Gandhinagar Institute of Technology**  
A Report on  
“Webinar - Introduction to Computer Vision”  
(Mobile and Wireless Technology Club - MWTC)  
(20<sup>th</sup> February 2021, Saturday)

**Webinar at a Glance:**

- Date: 20-02-2021, Time: 10:00 to 11:30 am, Venue: Google Meet platform.
- Expert session on Computer Vision by Prof Megha Desai & Prof Vineeta Nishad.
- Around 14 students from EE and EC department attended the webinar and discussed about the trends and opportunities in the field of computer vision.
- A hands-on session with MATLAB was also organized after completion of the expert talk.

**Objective of the event:**

Mobile and Wireless Technology Club (MWTC) of Gandhinagar Institute of Technology (GIT) is established to strengthen the practical aspects in Mobile and wireless technology which is one of the most advanced and emerging fields. Mobile and Wireless Technology Club (MWTC) organizes various co-curricular activities and workshops in order to groom the students and make them aware of the latest technologies and trends regarding the communication world.

**Activities during the event:**

Under the aegis of Mobile and Wireless Technology Club (MWTC), Electronics and Communication department organized a webinar on ‘Introduction to Computer Vision’ on 20<sup>th</sup> Feb 2021 with online Google Meet Platform. The expert session was conducted by Prof Megha Desai and Prof Vineeta Nishad for the final year students of Electrical & Electronics and Communication engineering stream. Around 14 students participated in this online session during 10:00 to 11:30 am and learned about the introduction and applications of computer vision in various domains.

Prof Megha Desai explained the importance of computer vision in daily lives and what are the challenges to make computer perceive in a similar way to human vision. Various visual examples helped the students grasp the fundamental concept of computer vision and how image processing tools behave like our brain. Computers can be trained with large scale data like Imagenet, Kinetics, Youtube-8M etc for developing advanced visual perception. Various tasks of computer vision were discussed in detail including object recognition, object localization, human detection, semantic segmentation, face recognition, face identification, facial expression detection, visual business recognition, high density crowd counting, biometrics and vision-based games. Prof Vineeta Nishad also explained about the programming of computer vision projects using MATLAB software demonstrations and insisted on developing skills regarding computer vision as this area is very trending among researchers and scholars these days as an important future technology.

### Outcomes of the event:

Computer vision is a field of artificial intelligence that trains computers to interpret and understand the visual world. Using digital images from cameras and videos and deep learning models, machines can accurately identify and classify objects — and then react to what they “see.” Through this webinar students understood how we come across computer vision in our everyday lives and learn how to overcome any project challenges.

### Feedback from students:

I am very thankful to the MWTC club for organizing expert session on computer vision. I got great technical knowledge about fundamentals and programming of computer vision. Through discussions, I come to know about minute details of such a sophisticated vision technology. Please arrange more such interactions so that we become aware about the technological advancements in the industry.

- Shah Shubham  
8<sup>th</sup> EE (170120109007)

Recent trend is all about technology and innovations. I am very happy that MWTC is continuously organizing such Expert Talk where we can learn about new things and get motivated.

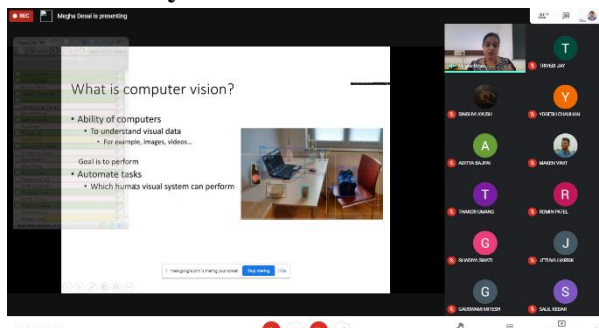
- Swati Ghadiya  
8<sup>th</sup> EC (180123111004)

### Feedback from faculty:

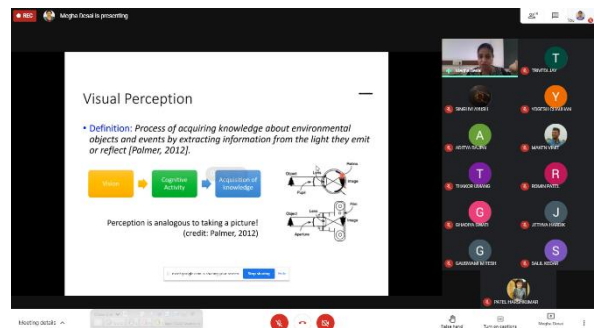
The expert talk organized by MWTC was very effective for encouraging students to develop skills required by the industry. Such expert session helps to create an environment where experience of faculty can guide the current students to get prepared for the challenges they are going to face after graduation.

- Prof. Megha Desai  
Asst. Prof, EC Department

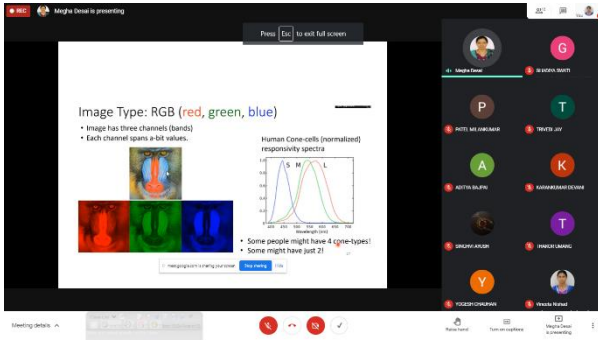
### Photo Gallery:



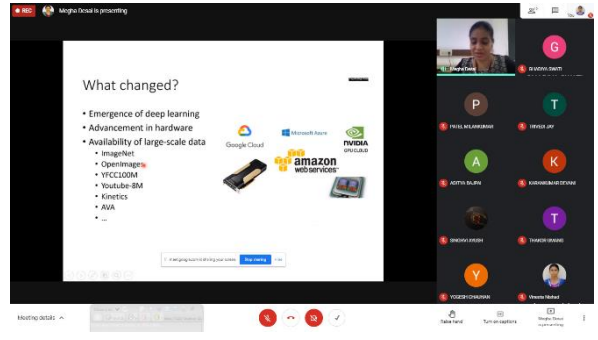
Prof Megha Desai explaining fundamentals of computer vision



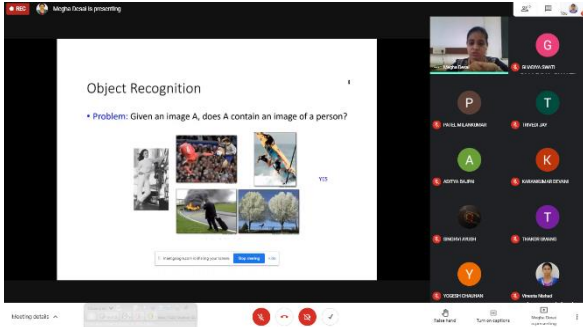
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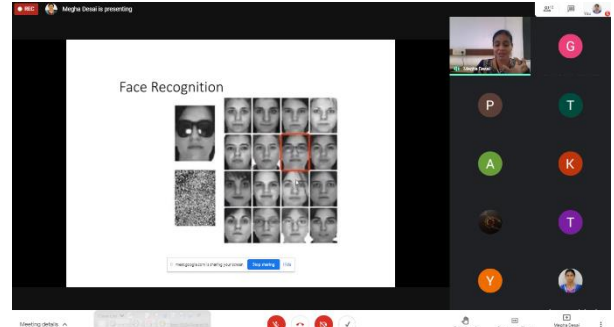
Prof Megha Desai explaining techniques of computer vision



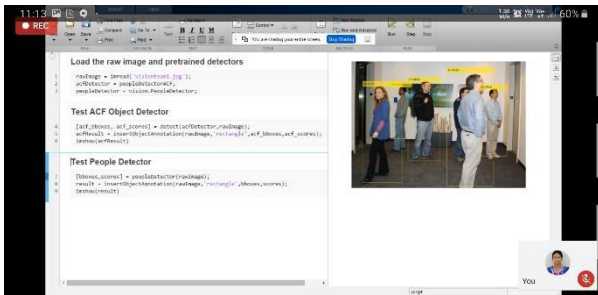
Prof Megha Desai explaining where to find large scale data for computer vision



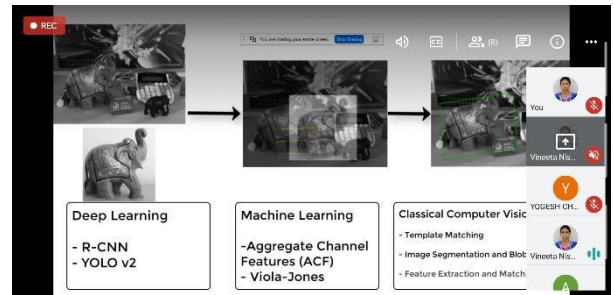
Prof Megha Desai explaining techniques of object recognition



Prof Megha Desai explaining techniques of face recognition



Prof Vineeta Nishad explaining MATLAB programming of human detection



Prof Vineeta Nishad explaining techniques of object recognition