Report on Webinar

Date & Time : 24th May,2020 from 11:00 am to 12:30 pm

Description: To demonstrate "Artificial Intelligence in Speech Recognition"

IEEE Computer Society Ideate team, Hyderabad Section had organized the webinar-based Tech Talk on the Topic Artificial Intelligence in Speech Recognition. Mr. Balaprasad Peddigari, the Secretary of the IEEE Hyderabad Section hosted the webinar with 100 delegates and appreciated their interest.

Mr.Saikumar Tara has addressed Mr.Dr. Anil Kumar Vuppala S to the audience and briefed about the speaker for the webinar is the Associate Professor, IIIT Hyderabad. From July 2019 onwards he is working as Associate Professor at IIIT Hyderabad. His research interests lie primarily in speech processing
in mobile and practical environments. He has published 5 book chapters, 23 reputed journals, and 62 international conference papers. He is currently handling 3 sponsored projects and completed 6 funded projects. He is guiding 6 full-time PhD students and 7 MS students. He successfully guided 2 PhD students. He has given more than 50 invited talks in workshops and conferences.

Dr. Anil Kumar Vuppala has started the session by sharing his knowledge on Artificial Intelligence in various Industries and strategies of Usage of AI. The importance of Artificial Intelligence in Speech Recognition has covered five major subtopics to be performed.

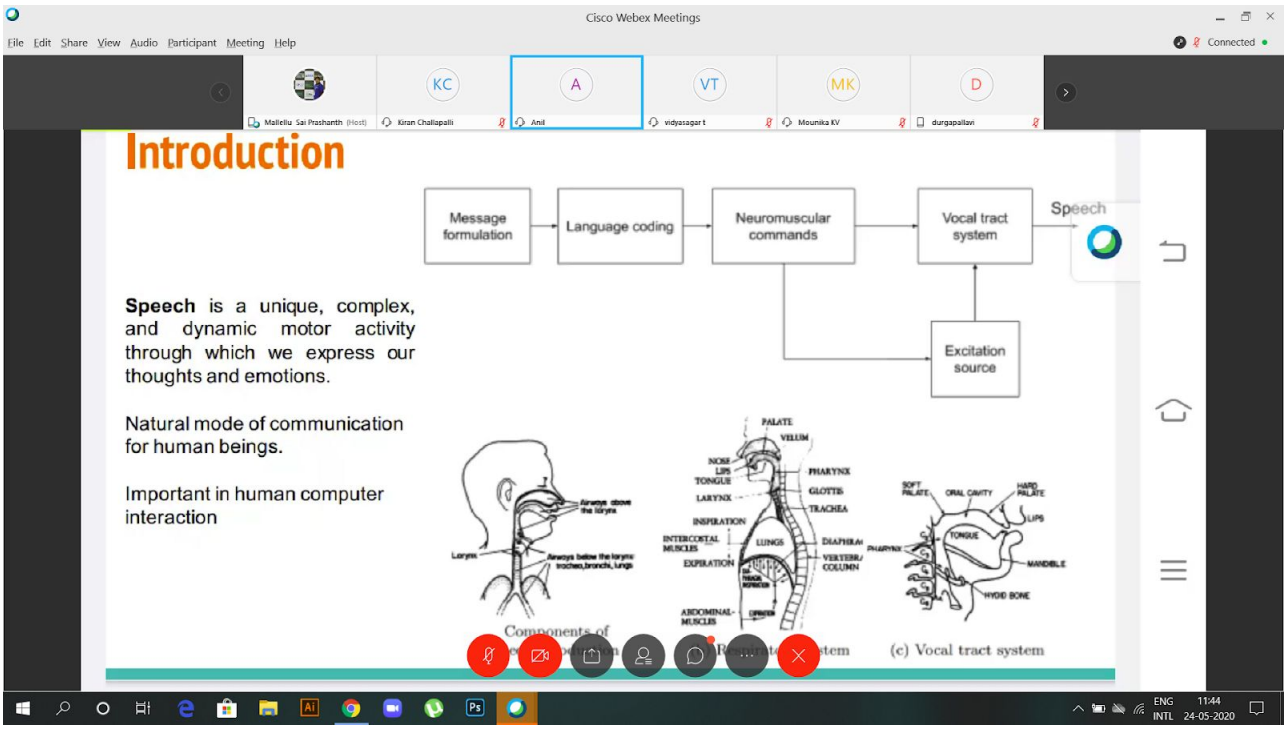
1. Introduction To Speech Recoginition in AI
2. Feature Extraction

3. Speech Systems

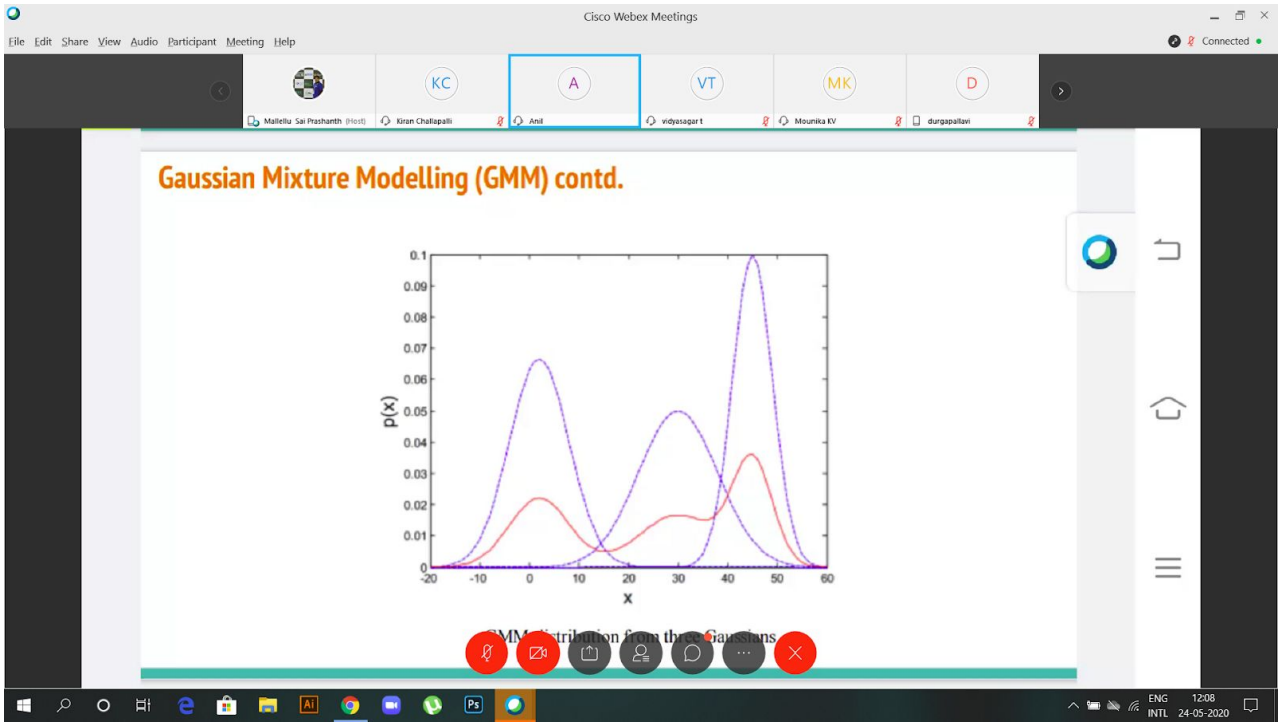
4. Gaussian Mixture Modelling

5.Automatic Speech Recognition

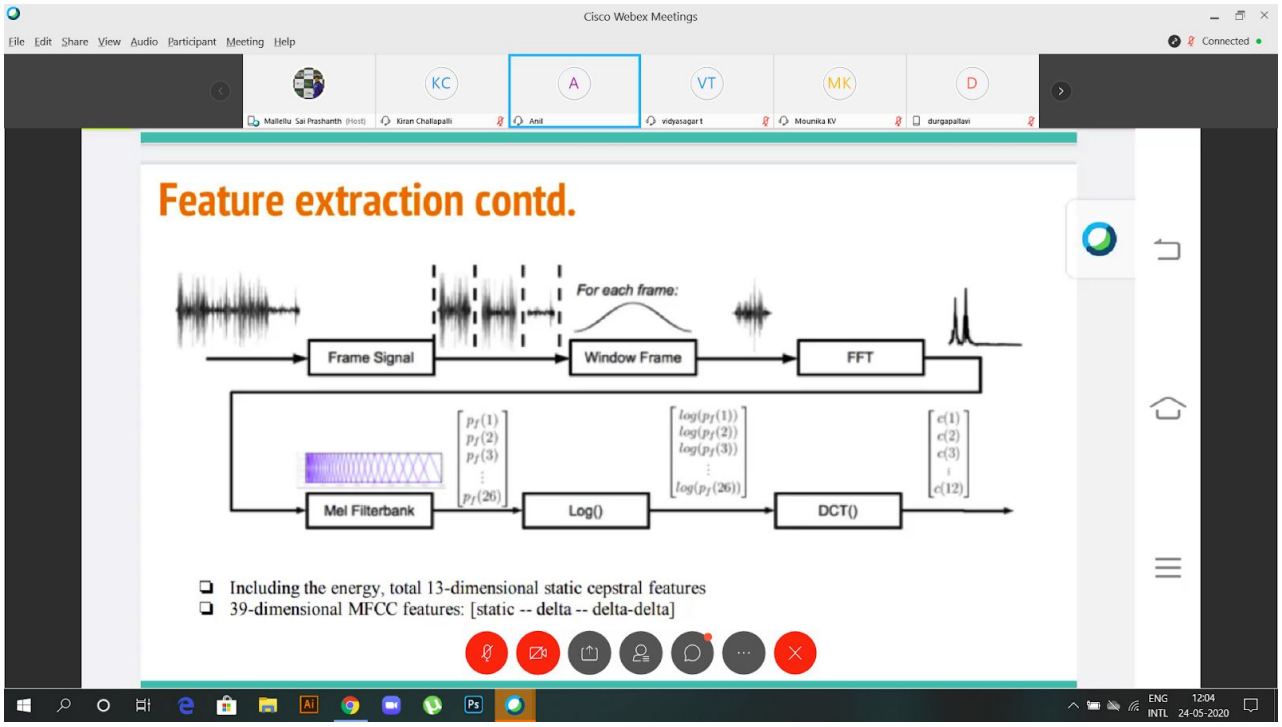
The webinar included topics like Speech Recognition in common, Artificial Intelligence Architecture.



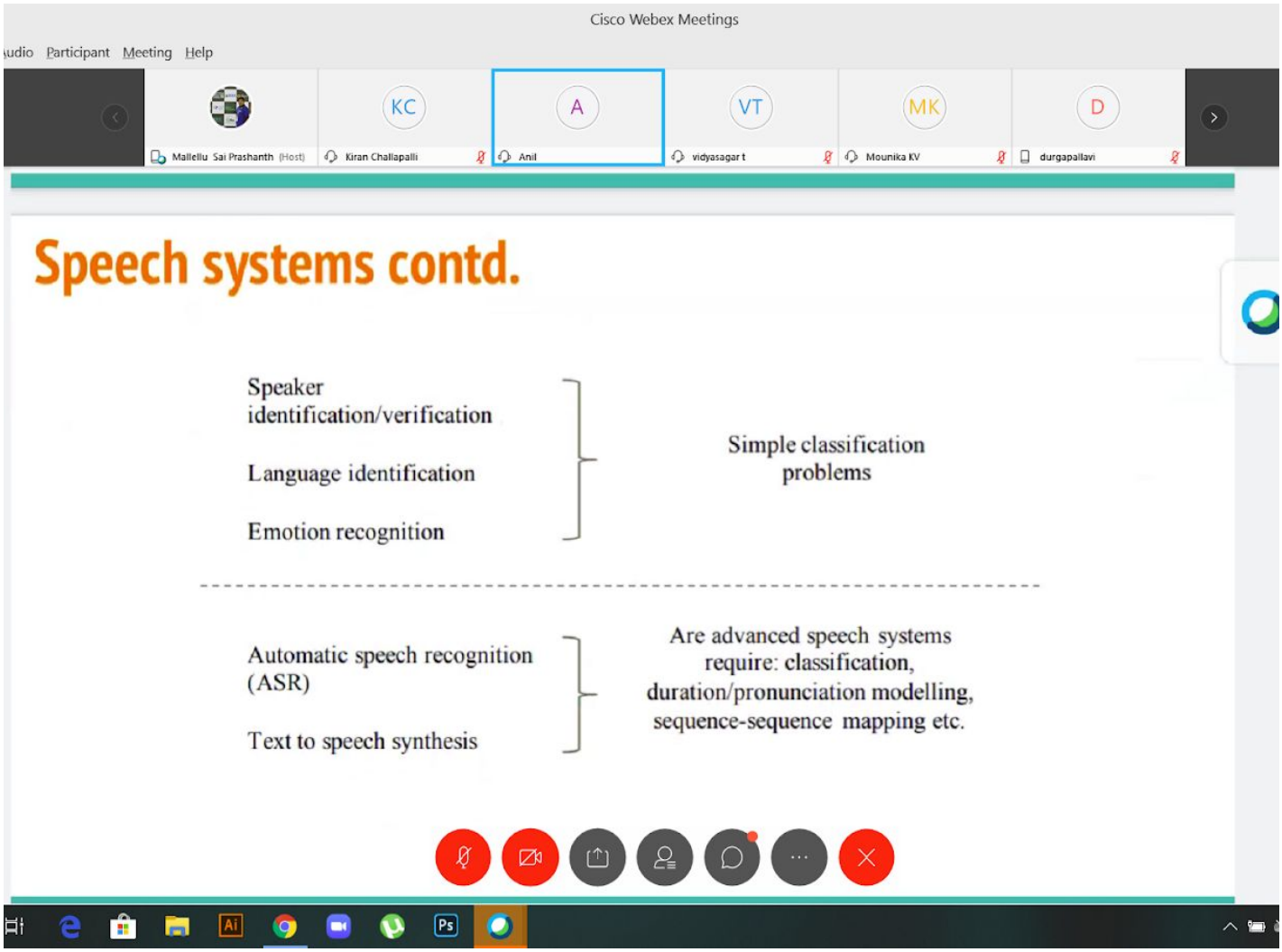
Mr. Anil Kumar Vuppula has started on the first topic Speech Recognition and the purpose of Speech Recognition in Speech recognition is an interdisciplinary subfield of computational linguistics that develops methodologies and technologies that enables the recognition and translation of spoken language into text by computers. It is also known as automatic speech recognition, computer speech recognition or speech to text



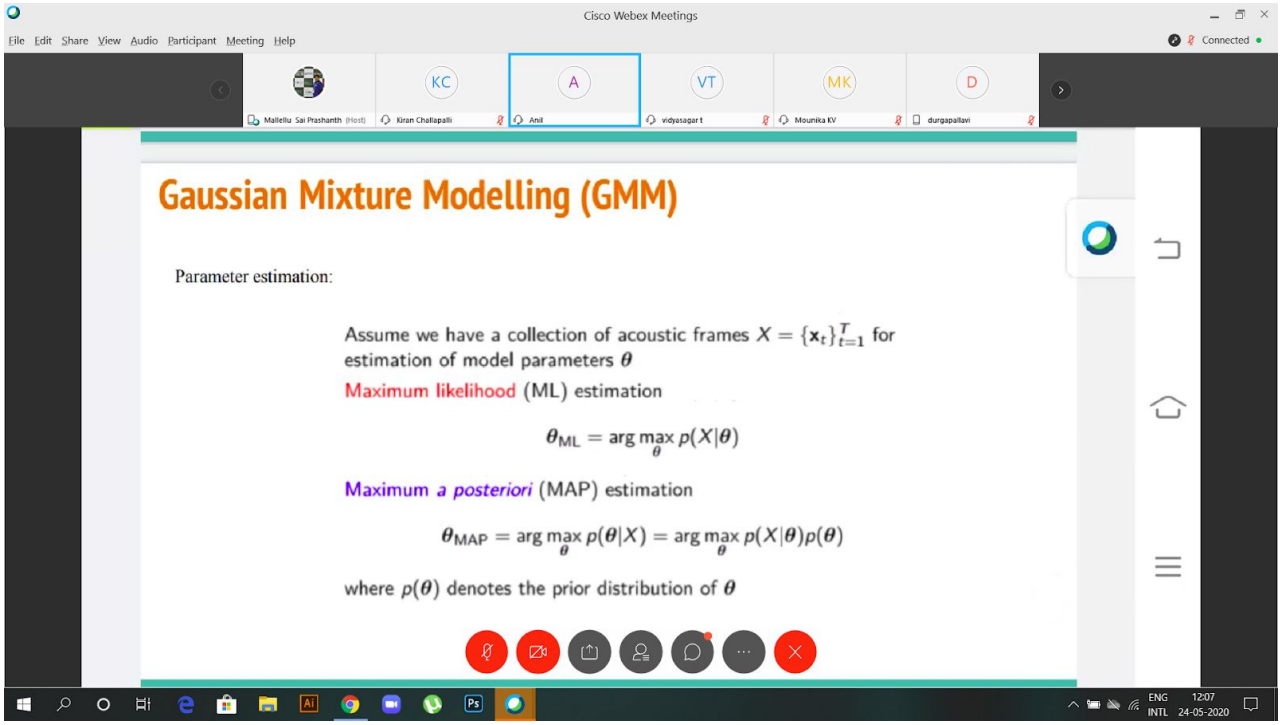
Mr.Anil Kumar Vuppula has continued the second topic as Feature Extraction in AI. Feature Extraction is the first major step of Speech Recognition. It divides the speech into 20-30ms for better results. Window Type is Hanning, Hamming, and Rectangular.



Mr. Anil Kumar Vuppula has explained about Various Speech Systems and its Applications. it has steps to be followed as Speaker Recognition, Speaker Verification, Emotion Recognition, Spoken Language Identification, Automatic Speech Recognition, Text to Speech Synthesis



Mr.Anil Kumar Vuppula handled the session on the Gaussian Mixture Modelling (GMM)



Mr. Anil Kumar Vuppula has explained the Automatic Speech Recognition is a transduction of spoken Acoustics sequence to text sequence. building of Various Speech Recognition systems from various Knowledge resources. The resources are Acoustics, Phonetics, Phonology, Prosodics, Lexical, Syntax, Semantics, Pragmantics.

The webinar ended with Mr. Balaprasad Peddigari presenting a vote of thanks to Mr. Anil Kumar Vuppula and his students for their time and all the delegates for showing interest in learning new things.

The outcome of the Webinar:

The Delegates learned in detail about the topics like Speech Recognition in AI, Applications of Speech Recognition in Various Industries and Usage and Future Scope of the Technology.