

Department of ELECTRONICS AND COMMUNICATION ENGINEERING

A Report on 5 Days FDP on “*ROLE OF AUTOMATION IN SPEECH PROCESSING*”

(19th December 2022 to 23rd December 2022)



The banner features a central network diagram with icons for a laptop, gear, smartphone, and person, connected by lines. The text is overlaid on this background.

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Department of Electronics & Communication Engineering
Faculty Development Program
on
ROLE OF AUTOMATION IN SPEECH PROCESSING
From 19th to 23rd December, 2022

ROBOTIC Coordinator **PROCESS** **AUTOMATION**
Mr. Ravi Bolimera
Assoc.Prof.ECE,NNRG

The Department of Electronics & Communication Engineering conducted a Five-Day Faculty Development Program on Role of Automation in Speech Processing. The FDP covered automation concepts, speech signal processing, speech recognition, artificial intelligence, machine learning and industrial applications of automated communication systems.

Day-1

The inaugural session introduced the importance of automation in modern communication systems and speech processing. The speaker explained the evolution of speech technologies, the role of artificial intelligence in automating speech recognition

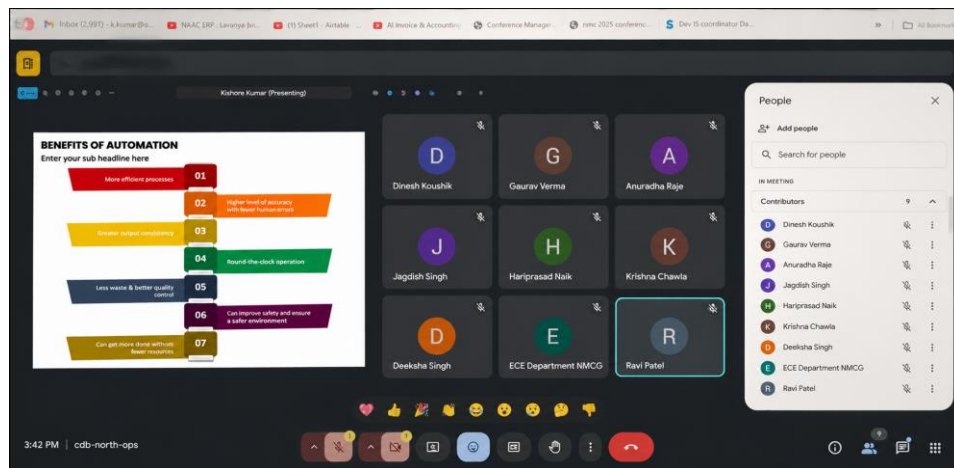
tasks, and the challenges involved in processing real-world speech signals. Participants gained an understanding of speech acquisition, feature extraction, and the significance of automation in reducing manual effort and improving system efficiency.



Inaugural session on Automation in Speech Processing.

Day-2

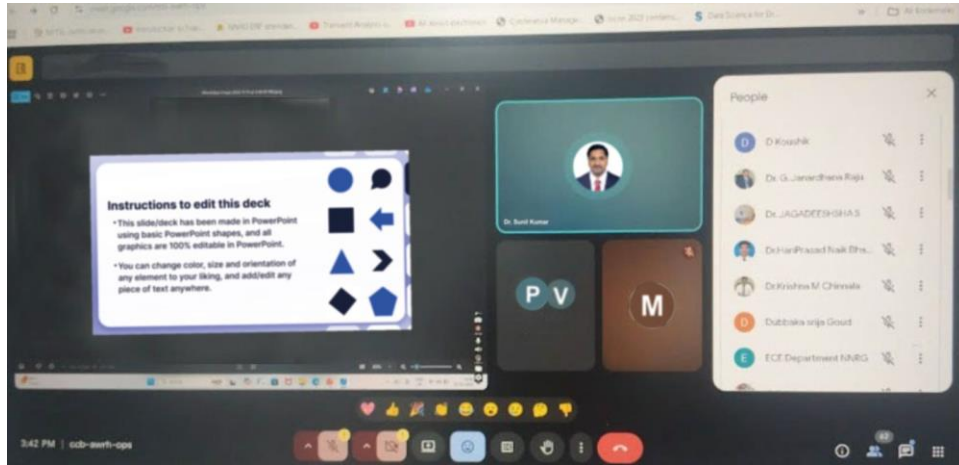
The second day focused on the benefits of automation and intelligent speech analytics. Various techniques used in speech recognition systems, voice assistants, and automated customer support systems were discussed. The session highlighted how automation improves accuracy, scalability, and response time in speech-enabled applications.



Expert session discussing benefits of automation and speech analytics.

Day-3

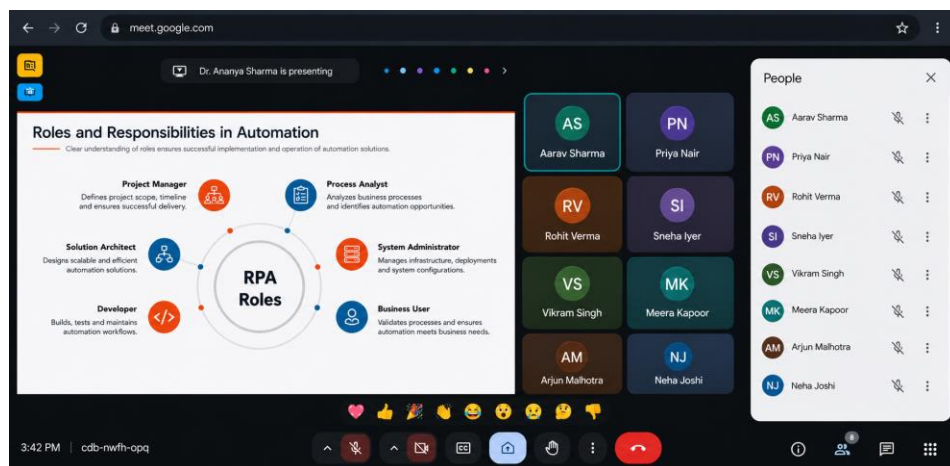
The third day covered automation frameworks and machine learning techniques used in speech processing applications. The resource person explained supervised and unsupervised learning approaches, speech classification methods, and practical implementation strategies using modern software tools. Participants were exposed to real-world case studies and research trends.



Session on machinelearning approaches and automation frameworks.

Day-4

The fourth day emphasized the roles and responsibilities involved in designing and deploying automated speech-processing systems. Discussions included workflow management, system integration, performance evaluation, and industrial applications. The session provided insights into the implementation of automation in enterprise communication environments.



Resource person explaining roles and responsibilities in automation systems.

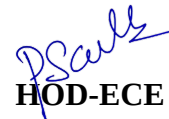
Day-5

The valedictory session focused on emerging trends in speech processing, including deep learning, conversational AI, natural language understanding, and intelligent virtual assistants. Participants discussed future research opportunities and the growing impact of automation on communication technologies and human-computer interaction.



Valedictory session and discussion on future trends in speech processing.


Coordinator


HOD-ECE