Pragati Engineering College (AUTONOMOUS)

A Report on

5 Day Online

Faculty Development Program

On

"Advancements in Signal Processing using AI"

on 21st April 2025 to 25thApril 2025

Organized by

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

PRAGATI ENGINEERING COLLEGE

(Approved by AICTE, Permanently Affiliated to JNTUK Kakinada & Accredited by NBA)
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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

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The Department of Electronics and Communication Engineering (ECE) organized a five-day online Faculty Development Program (FDP) on **"Advancements in Signal Processing Using AI"** from 21st April 2025 to 25th April 2025. The sessions were conducted daily from 6:00 PM to 8:30 PM in Microsoft Teams app.Dr. V. Sailaja, Professor of ECE, served as the Convener, and Dr. V. Radhika, Associate Professor, served as the Coordinator for this FDP.

Teams App joining Link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_NmQwMzhiYTctZjNlMS00ZDEyLThkYjQtN2M0YjUzMzRmY2Vi%40thread.v2/0?context=%7b%22Tid%22%3a%22377383c2-3be0-4e01-b2c8-8526d5e58adb%22%2c%22Oid%22%3a%225cc0f769-bd82-4726-a4b8-de9c8366559e%22%7d

ABOUT FDP:

The Faculty Development Program (FDP) on **"Advancements in Signal Processing Using AI"** offers a comprehensive introduction to core Artificial Intelligence (AI) techniques tailored for contemporary signal processing applications. The program emphasizes the integration of Machine Learning (ML) and Deep Learning (DL) methodologies to analyze, process, and extract meaningful features from a diverse range of signals.

The FDP begins with foundational AI-based signal processing concepts and advances to specialized topics such as time-series analysis, speech and audio processing, image and video interpretation, and hyperspectral data analysis. Special focus is given to the practical implementation of these techniques in key domains, including wireless communication, biomedical engineering, and the Internet of Things (IoT).

Participants will gain hands-on experience in applying ML and DL algorithms to real-world signal datasets, enhancing their ability to analyze and interpret complex signals. By the end of the program, faculty members will be equipped to pursue interdisciplinary research that bridges AI with emerging applications in communications, healthcare, and smart systems.

OBJECTIVES OF THE FDP:

- To introduce core Artificial Intelligence (AI) techniques relevant to modern signal processing.

- To demonstrate the use of Machine Learning (ML) and Deep Learning (DL) methods for signal analysis and feature extraction.
- To explore AI-driven applications in key domains such as communication systems, biomedical engineering, and the Internet of Things (IoT).

TOPICS TO BE COVERED

- **AI-Driven Signal Processing:** Fundamentals and real-world applications
- **Machine Learning Techniques:** For signal analysis and feature extraction
- **Deep Learning Applications:** In time-series, speech, and audio signal processing
- **AI in Imaging:** Techniques for image, video, and hyperspectral signal processing
- **Domain-Specific AI Solutions:** Applications in wireless communication, biomedical engineering, and Internet of Things (IoT) systems

ABOUT RESOURCE PERSONS:

Resource Person-1:Dr.Karthikeyan Elumalai

Dr. Karthikeyan Elumalai is an accomplished academic and researcher in the field of signal processing and artificial intelligence. He holds a Ph.D. in Signal Processing from the Indian Institute of Technology Delhi (2011–2018), an M.E. in Communication Systems from Anna University, Chennai (2007–2009), and a B.E. in Electronics and Communication Engineering from Anna University (2003–2007).

Since 2019, he has been serving as an Assistant Professor at SRM University-AP. His research interests include statistical signal processing, machine learning, deep learning, blind system identification, inverse problems using convex optimization, and sparse signal recovery through compressive sensing.

Dr. Elumalai has guided six Ph.D. scholars (two completed, four ongoing) and has led projects such as a DST-SERB-funded study on seismic data deconvolution. He is also a recipient of the 5G Hackathon Phase-1 award organized by the Ministry of Telecommunications, India.

He holds several Indian patents related to seismic data processing, system identification, and energy-efficient networks. His work is widely published in high-impact journals including IEEE Transactions on Geoscience and Remote Sensing, IEEE Access, and Nature Scientific Reports.His dedication to interdisciplinary research continues to contribute to advancements in AI-driven signal processing across critical domains such as communication, biomedical engineering, and IoT.

Resource Person-1:Dr Sunil Chinnadurai

Dr. Sunil Chinnadurai, a **Senior Member of the IEEE** and a **Fellow of the Institution of Electronics and Telecommunication Engineers (IETE)**, is currently an Associate Professor in the Department of Electronics and Communication Engineering and a Joint Faculty Member in the Department of Computer Science and Engineering at SRM University-AP, Andhra Pradesh, India. He has been serving in this role for the past six years.

He earned his **B.E.** degree from **Anna University, India**, in 2009, followed by an **M.S.** in Electronics Design from **Mid**

Sweden University, Sweden, in 2012. He completed his **Ph.D**. in Electronics and Communication Engineering at **Jeonbuk National University, South Korea**, in 2017. He subsequently worked as a Post-Doctoral Research Fellow at Jeonbuk National University and later as a **Post-Doctoral Research Scientist** at the Signal Intelligence Research Centre, Hanyang University, Seoul, **South Korea.**

Dr. Sunil's research interests include 5G and Beyond 5G (B5G) communications, Intelligent Reflecting Surfaces (IRS), Advanced Signal Processing, Machine Learning, and Hyperspectral Image Processing. He received the **Best Paper Award** at the 24th MSPT International Symposium in 2016.

He has authored more than **60** publications in high-impact venues, including ***IEEE Transactions on Intelligent Transportation Systems***, ***IEEE Transactions on Geoscience and Remote Sensing***, *Computer Networks*, and *Physical Communications*. His scholarly output includes **27** SCI-indexed journal papers (mostly in Q1 journals), 35 IEEE conference papers, **6** book chapters, and **21** patents. His research has a cumulative impact factor of **87**, with **311** total citations, an **h-index of 10**, and an **i10-index of 10.**

Resource Person-3:Dr V Sailaja

Dr. V Sailaja is currently a Professor in the Department of Electronics and Communication Engineering Pragati Engineering College Surampalem, Andhra Pradesh, India. She has been serving in this role for the past ten years.

She Worked as Hardware Engineer in Hara Computer Hyderabad during 1991,Worked as Graduate Engineering Trainee, ECIL, Hyderabad from Mar' 1992- Mar 1993,Worked as Lecture in Rajiv Gandhi Degree College, Rajahmundry from June 1993 – Sep' 1999,Worked as Asst Prof in Dept of ECE, GIET , Rajahmundry (ratified by JNTU HYD, Aug' 2000),Worked as Assoc. Prof in Dept of ECE, GIET, Rajahmundry (ratified by JNTU, HYD, Sep' 2006),Worked as Professor & Head of the Dept., ECE, GIET, Rajahmundry. (ratified by JNTUK, KKD, Jan 2011) from Jan 2011 to April 2015and working as professor in Dept. of ECE, Pragati Engineering College, Surampalem from July 2015 to till date .

Research and Publications

- **Publications**: Dr. Sailaja has authored several publications, including journal articles, book chapters, and conference proceedings. Notably, she co-authored a book chapter titled "Placement of Distribution Generators in IEEE 14 Bus System with Consumer Benefit Maximization," published in the *Advances in Electrical and Computer Technologies* series by Springer in 2021.
- **Research Supervision**: She has been recognized as a research guide by Jawaharlal Nehru Technological University, Kakinada (JNTUK) since the 2019-2020 academic year.

Departmental Leadership

As the Head of the ECE Department, Dr. Sailaja plays a pivotal role in various departmental committees.

Department Advisory Committee: Oversees strategic direction and industry collaborations.

- **R&D Committee**: Guides research initiatives and fosters innovation.
- **Program Assessment Committee**: Evaluates and enhances academic programs.
- **Project Review Committee**: Monitors and assesses student projects.

Recognition and Affiliations

- **Awards**: Dr. Sailaja received the "Best Teacher Award" from JNTUK in 2010, acknowledging her excellence in teaching.

- **Professional Memberships**: She is a life member of the Indian Society for Technical Education (ISTE) and the Institution of Electronics and Telecommunication Engineers (IETE), reflecting her commitment to professional development and industry standards.

Resource Person-4:Dr V Radhika

Dr. V. Radhika is an Associate Professor in the Department of Electronics and Communication Engineering (ECE) at Pragati Engineering College, located in Surampalem, Andhra Pradesh. She has made significant contributions to both academia and research.

Academic and Research Contributions

Dr. Radhika has been involved in various academic committees at the department level, including the Department Advisory Committee, R&D Committee, Program Assessment Committee, and Project Review Committee. Her roles in these committees reflect her active participation in shaping the academic and research directions of the department.

In addition to her academic roles, Dr. Radhika has authored textbooks and book chapters, contributing to the educational resources in her field. Her research interests and publications further underscore her commitment to advancing knowledge in electronics and communication engineering.

Recognition and Awards

Dr. Radhika's excellence in teaching and research has been recognized through various awards. She received the "Best Teacher of the Year" award for excellence in teaching, highlighting her dedication to quality education. Additionally, she was honored with the "Distinguished Women in Research and Innovation" award at the Noble Bond-2025 Indo-Thai Paragon Awards, acknowledging her impactful contributions to research and innovation.

Resource Person-5:Dr. Sharon Rose Victor Juvvanapudi

Dr. Sharon Rose Victor Juvvanapudi is an Associate Professor in the Department of Electronics and Communication Engineering (ECE) at Pragati Engineering College, Surampalem, Andhra Pradesh. She is actively involved in the college's Research and Development (R&D) initiatives and contributes to various academic committees.

Academic and Research Roles

- **R&D Co-Convener:** Dr. Sharon serves as the Co-Convener of the Research & Development Committee for the academic year 2024–2025, collaborating with other faculty members to oversee research activities at the institution
- **Department Committees:** She is a member of the Department Advisory Committee and the Program Assessment Committee, contributing to the strategic planning and evaluation of academic programs within the ECE department.

Teaching Contributions

Dr. Sharon teaches specialized subjects such as "Optical Communications," imparting knowledge on advanced communication technologies to students in the ECE department.

Resource Person-6:Dr. Subodh Panda

Dr. Subodh Kumar Panda is a Professor in the Department of Electronics and Communication Engineering (ECE) at Pragati Engineering College, Surampalem, Andhra Pradesh. He has been serving in this capacity since 2019.

Academic Qualifications and Professional Memberships

- **Ph.D.**: Dr. Panda earned his Doctorate in 2018 from SSU, Bhopal.
- **Professional Memberships**: He is a Life Member of several esteemed professional organizations, including the Institution of Engineers (IE), Indian Society for Technical Education (ISTE), Computer Society of India (CSI), Institution of Electronics and Telecommunication Engineers (IETE), and Indian Society of Orientation and Mobility (ISOI).

Research Interests and Publications

Dr. Panda's research interests lie in multidisciplinary engineering, particularly the collaborative work between computer science and electronics engineering for optimizing electromechanical systems. His scholarly contributions include:

- **Publications**: He has authored 8 publications, comprising 6 journal articles and 3 conference proceedings, with a total of 3 citations.
- **Patent**: Dr. Panda co-authored a patent titled "Regenerative Foldable E-Bike," registered on April 4, 2024.

Academic and Administrative Roles

At Pragati Engineering College, Dr. Panda is actively involved in various academic and administrative committees:

- **Department Advisory Committee**: He serves as a member, contributing to strategic decisions within the ECE department.
- **Research & Development (R&D) Committee**: As a member, he participates in overseeing and guiding research activities.
- **Program Assessment Committee**: Dr. Panda is a member, aiding in the evaluation and enhancement of academic programs.
- **Project Review Committee**: He contributes as a member, reviewing and providing feedback on student projects.
- **Student Welfare & Discipline Committee**: Dr. Panda is a member, focusing on maintaining student welfare and discipline.
- **Anti-Drug Committee**: He serves as a member, working towards promoting a drug-free campus environment.

DAY-1

Topic: AI-Driven Signal Processing: Fundamentals and real-world applications

Resource Person: **Dr.Karthikeyan Elumalai, Dr.V.Sailaja**

Schedule:

S. No	Time	
1	9:30 AM	Gathering of Participants in teams app
2	10:45 AM	Welcoming Resource Person and Participants by Dr. V Radhika
3	11:00 AM	Addressed by Principal
4	11:10 AM	Addressed by HOD
5	11:20 AM	Brief Introduction of Resource Person Dr. Karthikeyan Elumalai by FDP coordinator Dr. V Radhika
6	11:30AM	Handover the session to Resource Person

7	12:30AM	Lunch Break
8	1:30 PM	Handover the session to Resource Person Dr V Sailaja
9	2:45 PM	Tea Break
10	2:55 PM	Handover the session to Resource Person
11	3:45 PM	Clarify the doubts , Feedback form
12	4:00 PM	End of the interactive session

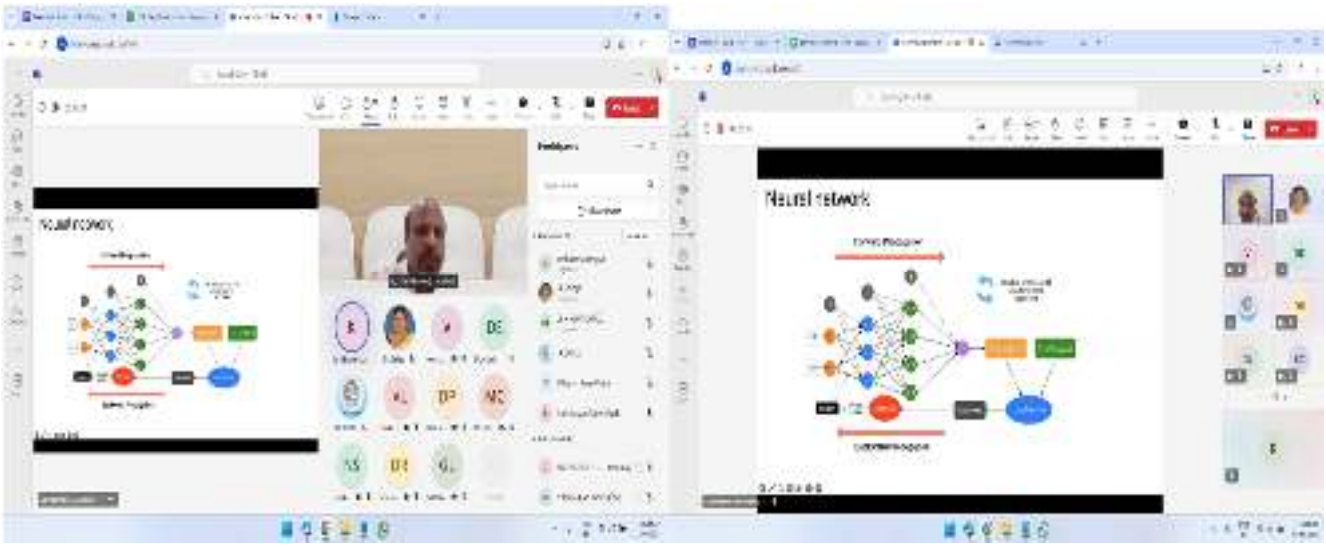
Session Overview:

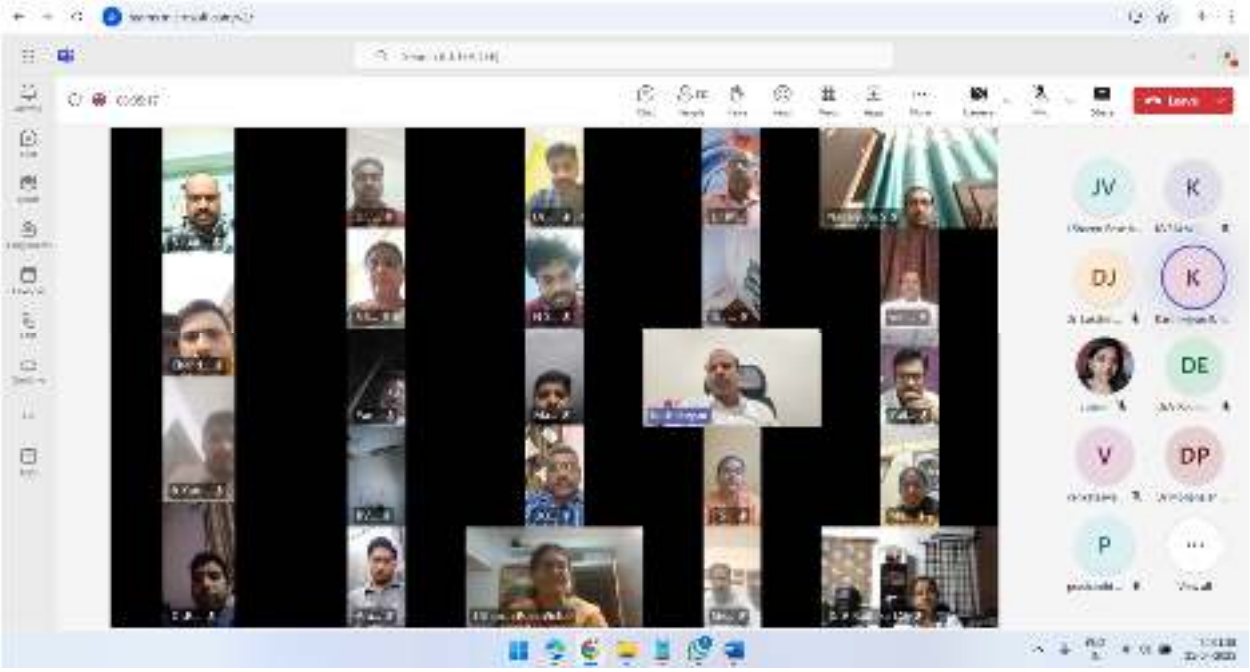
The first day of the Faculty Development Programme (FDP) commenced with an enlightening session on "AI-Driven Signal Processing: Fundamentals and Real-World Applications," delivered by **Dr. Karthikeyan Elumalai**. The session aimed to introduce participants to the core principles of artificial intelligence (AI) and its integration with modern signal processing techniques.

Dr. Karthikeyan began with a foundational overview of signal processing, including both analog and digital domains. He highlighted the transformation from conventional signal processing methods to intelligent, adaptive systems powered by AI. The session covered essential topics such as:

- Introduction to AI and Machine Learning (ML) concepts
- Fundamentals of signal processing: filtering, transformation, and feature extraction
- Role of neural networks in signal analysis
- AI models used in speech, image, and biomedical signal processing
- Real-time applications in healthcare, communication, and remote sensing

The resource person provided hands-on insights into how AI algorithms like CNNs and RNNs are revolutionizing the way signals are analyzed and interpreted. A few real-world case studies were discussed to illustrate practical deployments of AI-based signal processing, including voice recognition systems, ECG analysis, and noise reduction in communication systems.





Screenshots of Online FDP of Day-1

Interactive Participation:

Participants actively engaged in the session through Q&A and discussion forums. Dr. Karthikeyan responded to questions with clarity and shared additional resources for further study. The session was appreciated for its clarity, depth, and relevance to ongoing trends in AI applications.

DAY-2

Topic: Machine Learning Techniques: For signal analysis and feature extraction

Resource Person: **Dr. Karthikeyan Elumalai, Dr. J. Sharon Rose Victor**

Schedule:

S. No	Time	
1	9:30 AM-9:45 AM	Gathering of Participants in teams app
2	9:45 AM-10:45 AM	Welcoming Resource Person and Participants by Dr.B.N.Srinivas Rao
3	10:45 AM-11:00 AM	Tea Break
4	11:00 AM-12:30 AM	Handover the session to Resource Person
5	12.30 PM-01:30 PM	Lunch Break
6	01:30 PM-02:30 PM	The session Starts by Resource Person Dr J. Sharon Rose Victor
7	02:30 PM-02:45 PM	Tea Break
8	02:45 PM-03:45 PM	Participants interacted with Resource Person & Feedback
9	03:45 PM -04:00 PM	End of the interactive session

Session Overview:

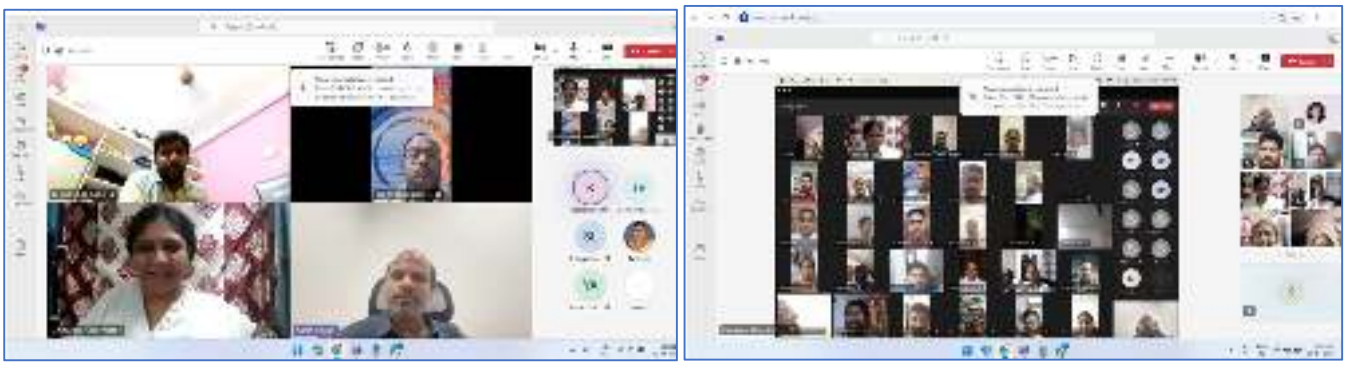
The second day of the Online Faculty Development Programme continued with a focused session on **"Machine Learning Techniques for Signal Analysis and Feature Extraction,"** delivered by **Dr. Karthikeyan Elumalai**. Building on the foundational concepts introduced on Day 1, this session delved deeper into the application of machine learning algorithms in signal processing tasks.

Dr. Karthikeyan began by revisiting the basic concepts of supervised and unsupervised learning, and their relevance in signal classification, pattern recognition, and feature identification. He explained the typical workflow in signal analysis using ML, including:

- Data acquisition and preprocessing
- Feature extraction methods (FFT, wavelets, statistical features)
- Dimensionality reduction techniques (PCA, LDA)
- Model training and evaluation (SVM, k-NN, Decision Trees, ANN)
- Signal classification and anomaly detection

A major highlight of the session was the explanation of **feature engineering**, emphasizing its importance in enhancing model accuracy and interpretability. Dr. Karthikeyan also discussed tools such as MATLAB and Python-based libraries (e.g., Scikit-learn, TensorFlow) used in practical implementations.

Real-world case studies, such as EEG signal classification for brain-computer interface applications and noise reduction in sensor data using ML models, were presented to demonstrate the impact and effectiveness of machine learning in signal analysis.



Screen Shots of Online FDP of Day-2

Interactive Participation:

The session witnessed active participation from faculty members and researchers who raised insightful questions related to model overfitting, feature selection strategies, and validation techniques. Dr. Karthikeyan's detailed responses and examples helped in deepening the participants' understanding of practical challenges and solutions.

DAY-3

Topic: Deep Learning Applications: In time-series, speech, and audio signal processing

Resource Person: **Dr Sunil Chinnadurai, Dr.V.Radhika**

Schedule:

S. No	Time	
1	9:30 AM-9:45 AM	Gathering of Participants in teams app
2	9:45 AM-10:45 AM	Welcoming Resource Person and Participants by Dr.V.Radhika
3	10:45 AM-11:00 AM	Tea Break
4	11:00 AM-12:30 AM	Handover the session to Resource Person
5	12.30 PM-01:30 PM	Lunch Break
6	01:30 PM-02:30 PM	The session Starts by Dr.V.Radhika
7	02:30 PM-02:45 PM	Tea Break
8	02:45 PM-03:45 PM	Participants interacted with Resource Person & Feedback
9	03:45 PM -04:00 PM	End of the interactive session

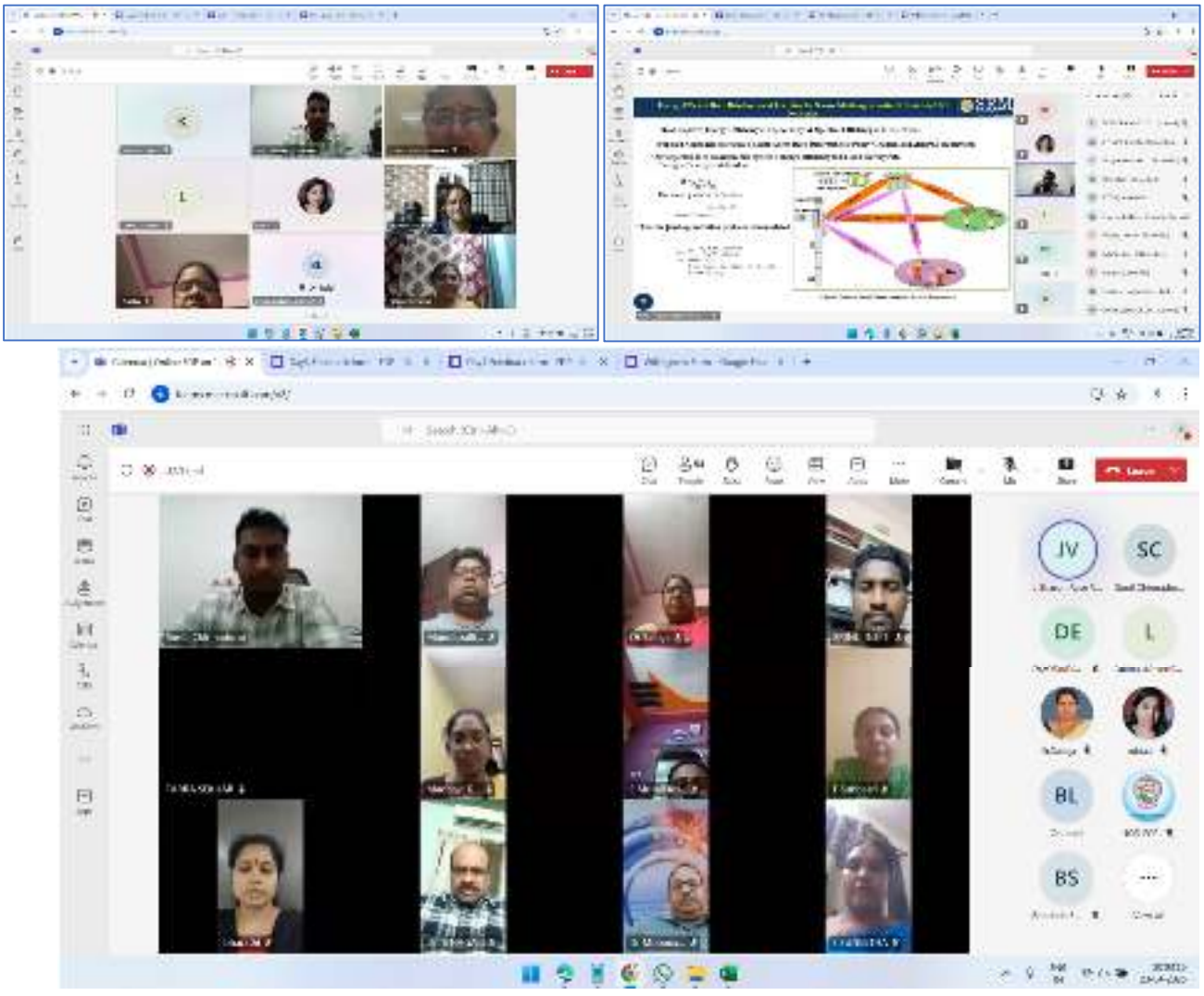
Session Overview:

The third day of the Online Faculty Development Programme featured an insightful session on **"Machine Learning Techniques: For Signal Analysis and Feature Extraction,"** delivered by **Dr. Sunil Chinnadurai**. The session aimed to equip participants with practical knowledge of how machine learning (ML) algorithms can be applied to signal processing tasks, especially in analyzing and extracting meaningful features from various signal types.

Dr. Sunil began the session with a concise recap of signal processing fundamentals and transitioned into the role of machine learning in enhancing signal interpretation. The core areas covered during the session included:

- Overview of supervised and unsupervised learning
- Key steps in signal data preparation for ML
- Feature extraction techniques such as statistical methods, wavelet transforms, and time-frequency analysis
- Implementation of ML models like Support Vector Machines (SVM), Random Forest, and k-Nearest Neighbors (k-NN) for signal classification
- Introduction to deep learning methods (CNNs, LSTMs) for complex signal datasets

The resource person demonstrated practical applications and shared illustrative examples from domains such as biomedical signal processing (e.g., ECG and EEG), speech recognition, and fault detection in industrial systems.



Screen Shots of Online FDP of Day-3

Participant Interaction:

Participants engaged actively during the session, asking technical questions on topics such as model validation, noise handling in signal datasets, and algorithm selection criteria. Dr. Sunil provided detailed explanations and practical tips for efficient implementation of ML pipelines for signal-related problems.

DAY-4

Topic: AI in Imaging: Techniques for image, video, and hyperspectral signal processing

Resource Person: **Dr Sunil Chinnadurai, Dr.Subodh Panda**

Schedule:

S. No	Time	
1	9:30 AM-9:45 AM	Gathering of Participants in teams app
2	9:45 AM-10:45 AM	Welcoming Resource Person and Participants by Dr. Subodh Panda
3	10:45 AM-11:00 AM	Tea Break
4	11:00 AM-12:30 AM	Handover the session to Resource Person
5	12.30 PM-01:30 PM	Lunch Break
6	01:30 PM-02:30 PM	The session Starts by Dr.Subodh Panda
7	02:30 PM-02:45 PM	Tea Break
8	02:45 PM-03:45 PM	Participants interacted with Resource Person & Feedback
9	03:45 PM -04:00 PM	End of the interactive session

Session Overview:

The fourth day of the Online Faculty Development Programme (FDP) featured a highly engaging and technically rich session on **"AI in Imaging: Techniques for Image, Video, and Hyperspectral Signal Processing"**, delivered by **Dr. Sunil Chinnadurai**. The session provided a comprehensive understanding of how artificial intelligence is transforming modern imaging systems across various domains.

Dr. Sunil commenced the session with a structured introduction to different imaging modalities, including standard 2D images, real-time video data, and high-dimensional hyperspectral images. He emphasized the challenges of processing such data and demonstrated how AI—particularly deep learning techniques—can be effectively applied for feature extraction, enhancement, and classification.

Topics covered included:

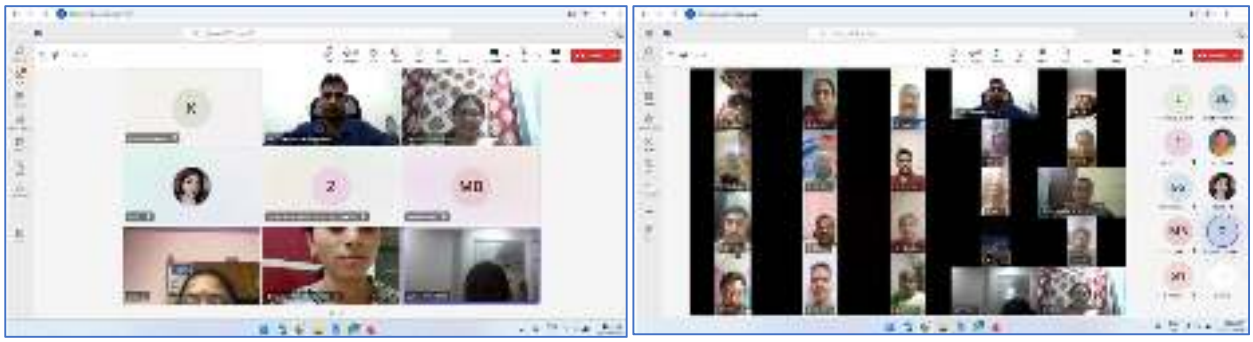
- Fundamentals of image and video signal processing
- Use of Convolutional Neural Networks (CNNs) for object detection and classification
- AI approaches for video analysis, including RNNs and 3D-CNNs
- Techniques in hyperspectral imaging: noise reduction, spectral-spatial analysis, and dimensionality reduction
- Applications in healthcare, defense surveillance, precision agriculture, and satellite imaging

Interactive Quiz Segment:

Midway through the session, **Dr. Sunil Chinnadurai conducted a 10-minute interactive quiz** for all participants. The quiz tested key concepts discussed during the session and encouraged active participation. This segment was particularly well-received, as it added an element of engagement and real-time feedback to the learning process. Participants appreciated the opportunity to assess their understanding and stay involved in a dynamic way.

Participant Feedback and Engagement:

The session was described by many participants as **highly interesting and impactful**, with particular praise for the interactive quiz and the real-world case studies presented. Several attendees raised questions related to model optimization for hyperspectral data, training data limitations, and cross-domain applications. Dr. Sunil responded with clarity and depth, further enriching the learning experience.



Screen Shots of Online FDP of Day-4

DAY-5

Topic: Domain-Specific AI Solutions: Applications in wireless communication, biomedical engineering, and Internet of Things (IoT) systems

Resource Person: **Dr Sunil Chinnadurai, Dr Sharon Rose Victor**

Schedule:

S. No	Time	
1	9:30 AM-9:45 AM	Gathering of Participants in teams app
2	9:45 AM-10:45 AM	Welcoming Resource Person and Participants by Dr. Sharon Rose Victor
3	10:45 AM-11:00 AM	Tea Break
4	11:00 AM-12:30 AM	Handover the session to Resource Person
5	12.30 PM-01:30 PM	Lunch Break
6	01:30 PM-02:30 PM	Handover the session to Resource Person
7	02:30 PM-02:45 PM	Tea Break
8	02:45 PM-03:45 PM	Feedback & Valedictory
9	03:45 PM -04:00 PM	End of the interactive session

Session Overview:

The fifth and final day of the Online Faculty Development Programme (FDP) concluded with an expert session on **"Domain-Specific AI Solutions: Applications in Wireless Communication, Biomedical Engineering, and Internet of Things (IoT) Systems,"** conducted by **Dr. Sunil Chinnadurai**.

Dr. Sunil delivered a focused and insightful presentation highlighting how AI is reshaping various engineering domains by offering intelligent, data-driven solutions. He emphasized the importance of

designing **domain-aware models** tailored to specific application requirements, optimizing performance, accuracy, and real-time deployment.

Screen Shots of Online FDP of Day-5

Key areas discussed during the session included:

- AI-driven network optimization and interference reduction in wireless communications
- Use of machine learning for medical diagnostics and patient monitoring in biomedical engineering
- Integration of AI in IoT-based systems for predictive maintenance, environmental monitoring, and smart cities
- Case studies demonstrating real-time AI applications in wearable devices, wireless sensor networks, and health monitoring systems

The session provided practical insights into the implementation challenges, data handling, model deployment strategies, and interdisciplinary collaboration required to build domain-specific AI applications.

Feedback and Valedictory:

As it was the final day of the FDP, **participant feedback** was gathered to reflect on the overall impact of the program.

Two participants shared their feedback live:

- **Ms. B. Savithri**, Assistant Professor, Department of ECE, **Dhanekula Engineering College**, appreciated the structured delivery of sessions, the clarity of concepts, and the real-time applicability of topics covered throughout the FDP. She noted that the sessions were **highly informative and beneficial for academic growth and future research.**
- **Dr. Ch. Venkateswarlu**, Associate Professor, Department of ECE, **Pragati Engineering College**, commended the resource persons for sharing deep technical insights and real-world examples. He mentioned that the FDP was **well-organized and intellectually enriching**, especially for faculty looking to integrate AI into their teaching and research work.

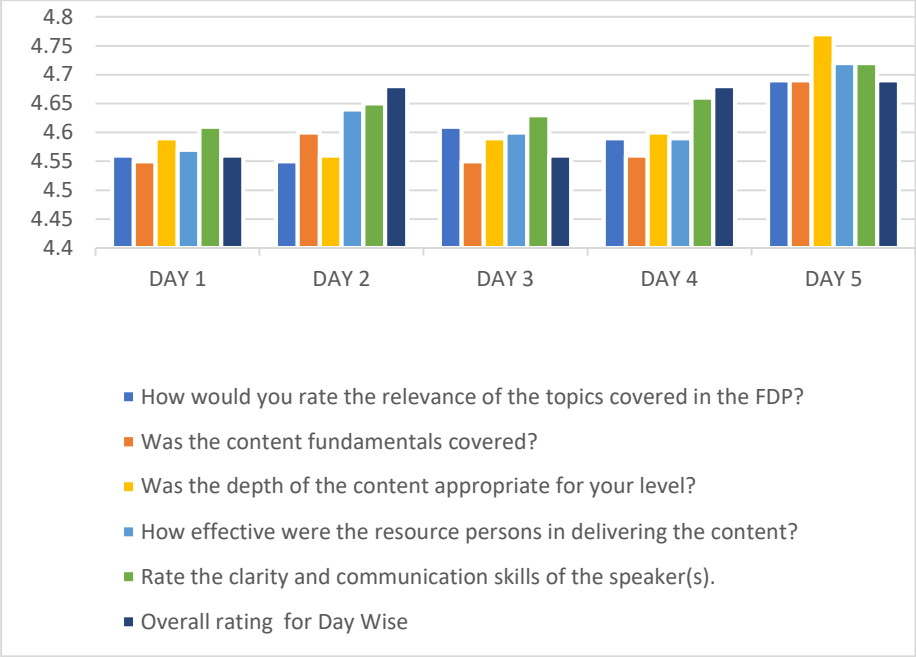
Participants also submitted written feedback through the final feedback form, highlighting satisfaction with the overall structure, session content, speaker expertise, and interactive opportunities.

Overall, **130 faculty** participated from the various universities and colleges.

Certificate Criteria: 80% Attendance for the participants and submission of feedback of every session.

Overall Feedback:

Description	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
How would you rate the relevance of the topics covered in the FDP?	4.56	4.55	4.61	4.59	4.69
Was the content fundamentals covered?	4.55	4.60	4.55	4.56	4.69
Was the depth of the content appropriate for your level?	4.59	4.56	4.59	4.60	4.77
How effective were the resource persons in delivering the content?	4.57	4.64	4.6	4.59	4.72
Rate the clarity and communication skills of the speaker(s).	4.61	4.65	4.63	4.66	4.72
Overall rating for Day Wise	4.56	4.68	4.56	4.68	4.69



Sample Certificate:

COUNCIL FOR SKILLS AND COMPETENCIES
NATION BUILDING THROUGH SKILLED YOUTH

CERTIFICATE OF PARTICIPATION

is Presented to

Mrs. Bondada Savithri

Dhanekula Institute of Engineering And Technology

for sucessfully completing the 5-day Online Faculty Development Programme on **Advancements in Signal Processing using AI**, conducted by the Department of Electronics and Communication Engineering, Pragati Engineering College, Surampalem from **21/04/2025** to **25/04/2025**

Head of Skills Development CSC India	FDP Convener, Pragati Engineering College	Principal, Pragati Engineering College

Knowlegde Partner for the Faculty Development Program

Council for Skills and Competencies (CSC India)

(Registered with NITI Aayog, Government of India & ISO 9001:2015 certified organization)

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Coordinator HOD-ECE