







# IEEE SPS Deep Learning and Its Applications to Biomedical Signal and Image Processing

December 04th-08th, 2023

Seasonal School website: https://sites.google.com/iiitdm.ac.in/ieee-sps-seasonal-school

### About IIITDM Kancheepuram

IIITDM Kancheepuram is a Centre of Excellence for technical education and research established in 2007 by the Ministry of Human Resource Development, Government of India. To pursue design and manufacturing-oriented engineering education and research and for promoting the competitive advantage of Indian products in global markets. The Institute is presently offering UG, PG, and Ph.D. programs in Computer Engineering, Electronics and Communication Engineering, and Mechanical Engineering. More details at www.iiitdm.ac.in

# About IEEE SPS Summer School

IEEE SPS Summer School 2023, "Deep Learning and Its Applications to Biomedical Signal and Image Processing" focuses on a strong and powerful deep learning techniques in the field of biomedical signal and image processing. The objective of this IEEE SPS Sponsored Summer School is to discuss recent trends in the field of Machine Learning and Deep Learning and its applications to Biomedical Signal and Image Processing. Moreover, the summer school aims to create an academic and research network between scientific communities across the world. Therefore, we expect a footfall of 30 participants from various parts of the country.

#### Topics to be covered

- Introduction to Machine Learning Classical methods.
- Fundamentals of Deep learning and their frameworks.
- Transfer learning and Reinforcement learning.
- Deep learning for Video processing.

#### Hand on sessions

- Fundamental applications of ML classification methods.
- Transfer learning and fine tuning process of deep learning models for various applications related to biomedical signal and image analysis.
- Tumor detection/ Classification using Classical Methods.

Registration Fee			
	Category	Amount	
Students	IEEE member	1000/-	
	Non member	1500/-	
Faculty/scientist	IEEE member	2000/-	
	Non member	3000/-	
Industry personals	IEEE member	3000/-	
	Non member	4000/-	

- The registration covers all technical session, evening sessions, hands-on training, course material, Lab visit, breakfast, lunch and dinner with in-campus accommodation (single/sharing basis depending on the availability).
- One banquet networking dinner.
- Enrollment is based on first come first serve basis.
- · Some travel grants/awards as per the norms (Sleeper class bus/train fare) will be provided to deserving student participants based on the request.
- Lecture slides and other reference materials will be shared with the registered candidates.
- · Certificates will be provided to those participants who will attend all the five days programs.

#### **Exciting Prize Opportunities**

- Best student participant award up to ₹ 5,000
- Prize money up to ₹ 10,000 for best student presentation(s)
- Some Travel grants up to ₹ 35,000

#### **Bank Details**

Name of the bank: IIITDM IEEE ACCOUNT Account Number: 6597898204 Bank and Branch: Indian Bank, Nallambakkam IFSC Code: IDIB000N056

## **Tentative List of Speakers**

1. Prof. Sumohana S. Channappayya, IIT Hyderabad

2. Prof. M. S. Manikandan, IIT Palakkad

3. Prof. Vineeth B, IIT Hyderabad

4. Prof. N. Venkateswaran, SSN Chennai

5. Dr. Appina Balasubramanyam, IIT Indore

6. Dr. Varun Gopi, NIT Tiruchirappalli

7.Dr. Masilamani V, IIITDM Kancheepuram 8. Dr. Priyanka Kokil, IIITDM Kancheepuram

9. Dr. Uttam Pal, IIITDM Kancheepuram

10. Dr. Monisha M, IIITDM Kancheepuram

11. Dr. Sudharson S, VIT Chennai

12.Dr. Chitti Babu B, IIITDM Kancheepuram

13. Dr. Pavan Kumar C, IIIT Dharwad

#### **PARTICIPANTS**

UG/PG Students, Ph.D Scholars, Academicians, and Industry professionals.

Chief Patron

Prof. M V Kartikeyan Director, IIITDM Kancheepuram

**Patrons** 

Dr. Jayavel S Dean SRICCE

Head of the Department and **Branch Counselor** 

Dr. B Chitti Babu

Associate Professor IIITDM, Kancheepuram

Convener

Dr. Priyanka Kokil

Associate Professor Department of ECE.

IIITDM, Kancheepuram





Link: https://forms.gle/SX9eiRHcYsQyheN2A

Convener contact details

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