5 days Short Term Training Program
on
Advanced Signal Processing Algorithms and Applications

11-15th May, 2019
at IIITDM Kancheepuram, Chennai-600127

Course Coordinator
Dr. Asutosh Kar

Organized by
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

About the Institute
IIITDM Kancheepuram, Chennai 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 to promote the competitive advantage of Indian products in global markets. The institute is located on 51 acres of campus on the outskirts of Chennai, off the Vandalur-Kelambakkam road. The campus houses the academic block, the administrative block, lecture hall complex and laboratory block.

About the Department
Department of Electronics and Communication Engineering is a fabric of multifaceted expertise in the fields like VLSI, Wireless Communications, Power Electronics and Drives, Signal Processing, Embedded and RF, Microwave Engineering. The in-house team is made up of academicians from the reputed institutions and industry personnel from India and abroad. The in-house team along with its talented pool of scholars and students is critical at producing the tangible outcome for the betterment of the society. Several projects from the Government and private agencies are underway.
Signal Processing is playing a vital role in making the modern day life sophisticated and in tackling the challenges faced in everyday life. Wherein areas like audio and acoustic signal processing, adaptive filtering, advanced speech processing, medical imaging and applications of signal processing in communication engineering are both fascinating and challenging at the same time. Audio and acoustics as a discipline is widely explored by industry and academia for providing the better human–machine interactions. Similarly, speech processing deals with linguistics, phonetics and psychoacoustics using machine learning, pattern recognition and artificial intelligence. On the other hand, allied image processing applications areas like medical imaging, satellite imaging, video surveillance, autonomous navigation etc., are widely approached areas of research due to their predominant need in today’s life through AI and computer vision. This program is designed to address the current trends in these areas with a unique blend of academic and industrial experts.

The major contents of the program are:
- Advancements in image processing and application in allied areas
- Optimization in video processing
- Advancements in acoustic signal processing and adaptive filtering
- Signal processing applications in communication engineering
- Current Trends in speech processing and coding.
- Real time challenges in speech signal enhancement and recognition

The detailed schedule will be sent through email to registered participants.

### How to Register

**Registration to this course is a two-step process:**

1. Participants will have to pay a required fee online.
2. Register using the Google form link provided. *(No need to send hard-copy)*
   - To pay online follow Payment Link
   1. Click the above link & Tick Check Box --> Proceed
   2. State of Corporate/Institution --> Tamil Nadu
   3. Type of Corporate/Institution --> Educational Institutions
   4. Educational Institutions Name --> IIITDM - EDUCATIONAL EVENTS
   5. Select Payment Category --> "ASPAA19"
   - Fill up the registration form providing the transaction details in the form. Go to: [LINK](#)
   - **On Spot Registration (only in cash)** can be done on 11th May 2019 by paying additional Rs. 300 per category.
   - Limited student’s accommodation is available on a payment basis in institute hostel. The hostel accommodation charge will be taken only in cash during the registration on 11th May 2019.
   - Participants are requested to bring their own laptops for hands on sessions.

### Fee Details

The registration fee to be paid for different categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ph.D./PG/UG</td>
<td>Rs. 3,894</td>
</tr>
<tr>
<td>Faculty</td>
<td>Rs. 4,720</td>
</tr>
<tr>
<td>Industry Personnel</td>
<td>Rs. 5,900</td>
</tr>
</tbody>
</table>

*Note:* All the amounts include 18% GST.

This fee will cover registration kit, course materials, access to all sessions, working lunch for 5 days, refreshments during the sessions and certificate for attending the course.

### Important Dates

- **Online registration starts on**: 04th April 2019
- **Online registration ends on**: 07th May 2019
- **Confirmation of online registration**: 08th May 2019
- **Spot registration**: 11th May 2019
Dr. Banshidhar Majhi is a Professor in the Department of Computer Science and Engineering at National Institute of Technology, Rourkela. He is presently Director at IIITDM, Kancheepurum, Chennai, India. His research interests include image processing, cryptography and security, parallel computing, biomedical signal analysis and biometrics. Profile

Dr. C S Ramalingam is an Associate Professor in the Department of Electrical Engineering at Indian Institute of Technology Madras., Chennai. His research interests are in the areas of signal Processing, Speech recognition and synthesis and coding. Profile

Dr. Prem Kumar K is an Assistant Professor in the Department of Electronics and Communication Engg at IIITDM Kancheepuram, Chennai, India His areas of interest in research are Big Data analytics, Internet of things, Cognitive radio, Social networks and Scheduling in networks. Profile

Dr. Asutosh Kar is an Assistant Professor in the Department of Electronics and Communication Engineering at IIITDM Kancheepuram, Chennai, India. His current research interests include Adaptive filters acoustic echo and feedback cancellation, hearing aid system design and active noise control. Profile

Dr. B.Chitti Babu, is an Assistant Professor in the Department of Electronics and Communication Engineering at IIITDM Kancheepuram, Chennai, India. His current research interests include power electronic applications in smart grids containing renewable energy resources, Low power photovoltaic system design for portable applications, control and grid integration of renewable energy resources. Profile

Dr. Malaya Kumar Nath, is an Assistant Professor in the Department of Electronics and Communication Engineering at NIT Puducherry. His research interests are in the areas of Image and Signal Processing, VLSI Signal Processing, and Pattern Recognition. Profile

Mr. Trideba Padhi, is a senior software engineer in Uniphore software systems at IIT Madras research park. His research interest includes speech processing, adaptive filters and acoustics applications. He is an expert in various speech processing techniques and softwares. Profile

Contact Details

Dr. Asutosh Kar
Department of Electronics and Communication
Indian Institute of Information Technology Design and Manufacturing, Kancheepurum,
Chennai, India -600127.
Phone: +91-44-2747-6387 (Office)
+91-8658204054 (Personal)
Email: asutoshkar@iiitdm.ac.in

How to Reach

Visit http://www.iiitdm.ac.in/Others/map.php