

# A Five Day Workshop on Research Challenges and Opportunities in Network System Design

Date: 24 TO 28 JUNE 2019

Venue: @IIITDM Kancheepuram, Melakottaiyur, Vandalur-Kelambakkam Road, Chennai - 600 127

## 1 Objective

This workshop will provide an excellent opportunity to students, researchers and practitioners to attend the in depth lectures on the computer network system design such as Endnode, switches, routers and firewalls. This workshop will provide hands on implementation of the few network functions and its performance estimations will be demonstrated. To enhance the knowledge and understandings on the networks system design, we plan to give a few demonstrations of the various works on the network functions that are implemented by us.

## 2 Organized By

Center for High Performance Reconfigurable Computing, Department of Computer Science and Engineering, Indian Institute of Information Technology Design and Manufacturing (IIITDM) Kancheepuram. IIITDM Kancheepuram is an Institute of National Importance under Ministry of Human Resources Development, Govt. of India. IIITDM Kancheepuram is established in the year 2007 with a vision to excel as a center for excellence in IT enabled Design and Manufacturing. This workshop is aligned to the vision statement of the Institute to develop the human resources for enhancing the speed requirements of network systems such as end-nodes and routers.

## 3 Topics to be Covered

- Introduction to Network System Design, Components of the Network Systems.
- Network Functions and its implementation Details.
- Network System Computing Models
- High Performance Network Interface Card design and Challenges.
- High Performance IP Lookup Algorithms and Architectures.
- High Performance Packet Classification Algorithms and Architectures.
- Network Processor Architectures and Research Challenges.

## 4 Target Audience

Faculty/Scientists/Researchers/PG and UG Students working on computer network, protocol processing and network systems algorithms and architectures for endnodes and routers. Free Internship opportunity at HPRC will be given for the interested UG and PG student participants.

## 5 Prerequisite

Participant should have working knowledge of data structures and algorithms, and fundamental concepts about computer organization and computer networks.

## 6 Background of Previous Events

CHRC has very good expertise in organizing the workshop in a well planned manner. The details of the previous workshops, budget and feedback from the participant can be found at <http://web.iiitdm.ac.in/noor/athprcse.html>

## 7 Registration Details

- Online Registration Open from April 10, 2019.
- Registration Link:  
<http://web.iiitdm.ac.in/noor/index.html>
- Registration Closes by June 22, 2019.

## 8 Registration Fees

R&D Labs/ Faculty/ PSUs With Hostel Accommodation	Rs. 8000*
R&D Labs/ Faculty/ PSUs Without Accommodation	Rs. 6000*
Research Scholars, PG & UG Students with Accommodation	Rs. 7000*
Research Scholars, PG & UG Students without Accommodation	Rs. 6000*

\* Inclusive of 18% GST as per GoI norms and 15% Institute Overheads.

## 9 Important Details

- NEFT or IMPS Account Details:  
IIITDM Educational Events; Acc.No:35594334673;  
State Bank of India; Kandigai Branch; IFSC  
code: SBIN0018365.
- Registration Fee covers FOOD and HOSTEL ACCOMMODATION for all the 5 days. No TA/DA will be provided.

## 10 Contact Info:

**Dr Noor Mahammad Sk**  
Workshop Organizing Chair  
NSD Workshop

Indian Institute of Information Technology,  
Design and Manufacturing (IIITDM) Kancheepuram  
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**For enquiry and clarification, please contact:**

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**How to Reach Venue ([www.iiitdm.ac.in](http://www.iiitdm.ac.in)):**

IIITDM Kancheepuram Campus in Chennai on Vandalur Kelambakkam Road. It is 9KMs from Vandalur Zoo toward East Direction, Landmark: KANDIGAI.