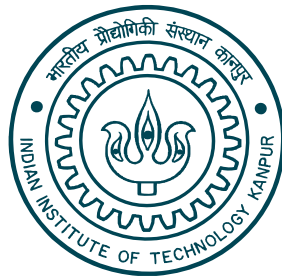


# Centre for Continuing Education



Indian Institute of Technology Kanpur

**Topics Discussed**

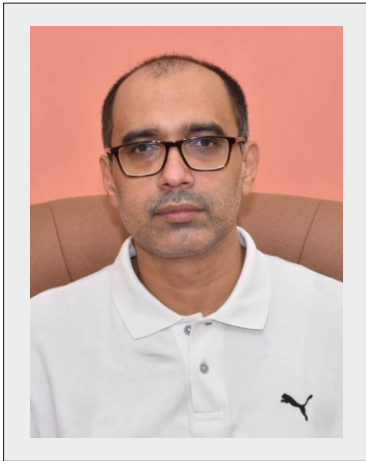
- AR/VR Applications
- Internet of Things (IoT)
- 5G/6G and future mobile networks
- Smart Cities
- Cyber Security
- Fintech
- Smart Grid
- Technology Investment and Startups

**2nd IEEE Winter School on Fog/Edge Computing 2020**  
Virtual School organized by IIT Kanpur India

**Flavio Bonomi**  
Nebbiolo Tech, USA  
Email: fbonomi@lynx.com  
Inception of Fog/Edge Computing  
Dec. 29 – 2020, 10:30 AM IST

**Ananth Krishnan**  
CTO, Tata Consultancy Services  
TCS India  
Email: ananth.krishnan@tcs.com  
Keynote: Connected Intelligence at Edge  
Dec. 29 – 2020, 12:30 PM IST

# Message from Head



## **Prof. Rajesh M Hegde**

Department of Electrical Engineering  
IIT Kanpur  
<https://home.iitk.ac.in/~rhegde/>

On behalf of centre for continuing education, I take this opportunity to wish you a very happy new year 2021. We hope this new year brings hope, health, and happiness to all of you. I am happy to present the fourth newsletter of the Centre for Continuing Education (CCE) to the IIT Kanpur community. The situation arising out of COVID-19 pandemic has not ebbed yet, and like all of you, We at CCE are looking forward to the days when on campus activities can resume at the Institute. I am certain that good times will follow soon.

I am very happy to report again that several virtual short term courses, workshops, MooCs, and winter schools were successfully conducted online, in the period between July to December 2020, under the umbrella of the CCE. Thirteen (13) virtual events were conducted completely online. All of them were very well attended despite the pandemic. The IEEE winter school on Fog/Edge computing conducted in december 2020 attracted around one thousand (1000) participants from all over the world including Europe and the USA. The certification program conducted by C3I on cyber security has also been very popular. Two cohorts have been completed under this highly successful certification program. The Foreign Language Program (FLP) has completed its second cohort completely online under the CCE. The SURGE program for 2020 was conducted completely online due to the pandemic. Prof. Harish Verma is continuing to work with the CCE and has offered some highly popular MooCs on science in 2020. The Vigyan Jyoti program of the DST which encourages STEM education among rural school girls will be run virtually for the first time in 2021 by the CCE along with Navodaya Vidyalaya Sarsaul – Kanpur.

We will continue to make efforts to offer as many online courses as possible from IITK Faculty during the year 2021. We look forward to the second half of 2021, when we can possibly resume our on campus activity and host events physically. I once again sincerely hope that the unprecedented situation we are in resolves by the second half of 2021. I look forward to communicating with all of you again very soon.

01

## MATLAB Project Course in Latest MIMO Technologies for 5G Networks and IoT Massive MIMO, mm Wave MIMO, NOMA, Cooperative Communication, Cognitive

27 July to 4 August 2020

### Coordinator



Prof. Aditya K. Jagannatham

Dept. of Electrical Engineering  
IIT Kanpur

<https://home.iitk.ac.in/~adityaj/>

02

## Competition on Physics Experiments

1-10 August 2020

### Coordinators



Prof. T.V. Prabhakar

Dept. of Computer Science Engineering  
IIT Kanpur

<https://www.cse.iitk.ac.in/users/tvp/>



Prof. H.C. Verma

Dept. of Department of Physics  
IIT Kanpur

<https://home.iitk.ac.in/~hcverma/>

# 03

## Basic of Electrodynamics-1 (Electrostatics)

15 August - 15 December 2020

### Coordinators



Prof. T.V. Prabhakar

Dept. of Computer Science Engineering  
IIT Kanpur

<https://www.cse.iitk.ac.in/users/typ/>



Prof. H.C. Verma

Dept. of Department of Physics  
IIT Kanpur

<https://home.iitk.ac.in/~hcverma/>

# 04

## Data Analysis in Criminal Justice

17 August - 6 November 2020

### Coordinators



Prof. Mainak Chauduri

Dept. of Computer Science Engineering  
IIT Kanpur

<https://www.iitk.ac.in/new/dr-mainak-chauduri>



Dr. Arvind Verma

Center for Cyber Security and Cyber Defence  
IIT Kanpur

05

## Theory and Simulation of Modern Wireless Systems

1 September - 30 November 2020

### Coordinator



Prof. Aditya K. Jagannatham

Dept. of Electrical Engineering  
IIT Kanpur

<https://home.iitk.ac.in/~adityaj/>

06

## High Intensity Training(HIT) Programs on Massive MIMO mmWA ve MIMO OFDM NOMA

25 September - 11 October 2020

### Coordinator



Prof. Aditya K. Jagannatham

Dept. of Electrical Engineering  
IIT Kanpur

<https://home.iitk.ac.in/~adityaj/>

07

## Foreign Language programme 20-21

1 September 2020 - 30 June 2021

### Coordinator



Prof. Sayan Chattopadhyay

Dept. of Humanities and Social Sciences  
IIT Kanpur

<https://iitk.ac.in/new/sayan-chattopadhyay>

08

## mm Wave MIMO Technology

1 November 2020 -31 March 2021

### Coordinator



Prof. Aditya K. Jagannatham

Dept. of Electrical Engineering  
IIT Kanpur

<https://home.iitk.ac.in/~adityaj/>

09

## The Present and future of Satellite Gravimetry- online workshop on the design, development and application of satellite gravimetry

18-20 November 2020

### Coordinator



Dr. Balaji Devaraju

Dept. of Civil Engineering  
IIT Kanpur

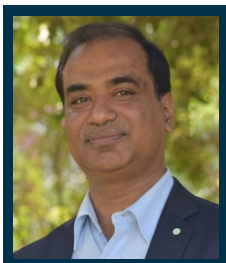
<https://www.iitk.ac.in/new/balaji-devaraju>

10

## Handling Large Scale Data & Data Analysis Using R

2-15 December 2020

### Coordinator



Prof. Shalabh

Dept. of Mathematics & Statistics  
IIT Kanpur

<https://home.iitk.ac.in/~shalab/>

11

**IITK-Kanpur/LCC-CNRS joint CEFIPRA/IFCPAR  
Symposium on Organometallic Chemistry and Catalysis**  
8-10 December 2020

**Coordinator**



Prof. Basker Sundararaju

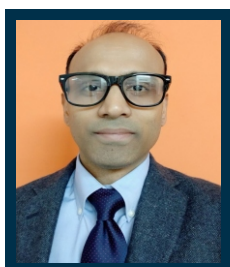
Dept. of Chemistry  
IIT Kanpur

<https://www.iitk.ac.in/new/basker-sundararaju>

12

**IIT Kanpur Winter School (IIWS) on Python for Design,  
Analysis and Simulation of 5G Systems (PROGRAM A:  
Multi-user, Massive MIMO and mm Wave MIMO,**  
21 December 2020 - 12 January 2021

**Coordinator**



Prof. Aditya K. Jagannatham

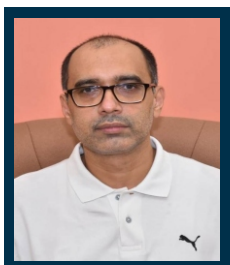
Dept. of Electrical Engineering  
IIT Kanpur

<https://home.iitk.ac.in/~adityaj/>

13

**2nd IEEE Winter School on Fog/Edge Computing 2020**  
29-30 December 2020

**Coordinator**



Prof. Rajesh M. Hegde

Dept. of Electrical Engineering  
IIT Kanpur

<https://home.iitk.ac.in/~rhegde/>

# Faculty in Focus



## **Prof. Aditya K. Jagannatham**

Department of Electrical Engineering  
IIT Kanpur  
<https://home.iitk.ac.in/~adityaj/>

Prof. Aditya K. Jagannatham is a Professor in the Electrical Engineering department at IIT Kanpur, where he holds the Arun Kumar Chair Professorship. He received his B.Tech from IIT Bombay and M.S. and Ph.D. degrees from the University of California, San Diego, U.S.A. He was subsequently employed as a senior wireless systems engineer at Qualcomm, San Diego, California, one of the global leaders in wireless chipset design and R&D. His research interests are in the area of 5G technologies such as massive MIMO, mmWave MIMO, FBMC, NOMA, and others. His research articles have been published extensively in leading international IEEE journals and conferences. He is a well-known trainer on 5G technology and has conducted several self-sponsored courses and schools. He has been recognized with several awards such as the P.K. Kelkar Young Faculty Research Fellowship, Qualcomm Innovation Fellowship (QInF), Arun Kumar Chair and IITK Excellence in Teaching Award.





# CCE Staff



Mr. Gyanendra Singh



Mrs. Sanno Devi  
Kushwaha



Mr. Vinay Kumar



Mr. Sudesh Kumar  
Gupta



Mr. Ram Naresh  
Chaurasiya



Mr. Yogendra Singh



Mr. Rajesh Kumar

**CCE Office**

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