



High-End Workshop on: AI-enabled IoT for Healthcare and Medical Electronics

(Under the KARYASHALA Scheme - A SERB initiative)

16-Jan-2023 – 22-Jan-2023



Organized by
Department of Electrical Engineering
Indian Institute of Technology Patna
Bihta, Bihar:- 801106

About IIT Patna

Indian Institute of Technology Patna, established in August 2008, is an autonomous institute of education and research in science, engineering, and technology located in Bihta, 35 km from Patna. The new campus is spread over 500 acres of green land. IIT Patna has ten academic departments that offer B.Tech, M.Tech, MSc, and Ph.D. programs. The faculty members of this institute come with academic and research training from various institutes of excellence within the country and abroad. The recent publication records of the faculty members is commendable.



It includes many reputed national and international journals. Research activity in IIT Patna has been published in high-quality and peer-reviewed national and international journals. Faculty members of IIT Patna have been also participating in national and international conferences of repute.

Objective

- Knowledge of various sensors, Internet of Things (IoT), Artificial Intelligence (AI), machine learning, medical electronics and recent innovations in healthcare
- To demonstrate and hands-on different advanced equipment's available with the institute such smart healthcare systems

Contents

- Biomedical Sensors
- IoT Communication Protocols
- Edge/Fog Computing in Healthcare
- Machine Learning for Health Dataset
- Deep Learning for Health Dataset
- Artificial Intelligence for Healthcare
- Biomedical Electronics
- Hardware and Software Security
- Neuromorphic Computing
- Hands-on Python with Health Dataset
- Hands-on e-Health Kits
- Design and Brainstorming Sessions

Patron:

Prof. T. N. Singh, Director, IIT Patna

Conveners: Dr. Sudhir Kumar

Dr. Pramod Kumar Tiwari

Prof. Jawar Singh

Contact us


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Support



Outcomes

1. Participants will get broad knowledge of biomedical sensors, IoT, ML/DL/AI, hands-on sessions and different applications.
2. Participants will learn implementation on various software platforms (Google colab)

Who can attend: *This is open to PG and PhD students from all institutes, colleges and universities. The selection of participants will be done by the committee.*

Tentative Speakers

Prof. Parthasarathi Chakrabarti, Director, IEST
Prof. Rajesh M. Hegde (IIT Kanpur)
Prof. Satyabrata Jit (IIT BHU)
Dr. N. S. Rajput (IIT BHU)
Dr. Yogesh Kumar (AIIMS Patna)
Dr. Rajkishor Sharma (Patna Medical College)
Dr. Hari Prabhat Gupta (IIT BHU)
Prof. Preetam Kumar (IIT Patna)
Dr. Rajib Kumar Jha (IIT Patna)
Prof. Jawar Singh (IIT Patna)
Dr. Udit Satija (IIT Patna)
Dr. Sudhir Kumar (IIT Patna)

Registration details:

Registration fee: Rs. 2000

[Includes Boarding, Lodging, and Travel support (maximum train-AC-III fare)]

The amount for the workshop will be accepted only through e-transfer /RTGS/NEFT.

To register apply on the below google link-
<https://forms.gle/p2ss9WVt1MW2w2L56>

Total number of participants is limited to 25.

Boarding, lodging, and travel support (train-AC-III only) will be provided to all the 25 selected participants. Participation Certificates will be given to the candidates on successful completion.

Details for Online Payments:

Name of the Account: Registrar, IIT Patna

Bank: State Bank of India,

Branch: IIT Patna, Bihta

Bank Account No.: 30957551934

Beneficiary: Indian Institute of Technology Patna

IFSC: SBIN0017164

Account Type: Savings A/c