



## Event speakers

01

### Dr. Manoj Kumar

Assistant Professor,  
Neuroimaging and Interventional  
Radiology (NIIR), NIMHANS,  
Bangalore, India.



02

### Dr. Yuvaraj Rajamanickam

Research Scientist,  
Science of Learning in Education Centre,  
Nanyang Technological University (NTU),  
Singapore.



03

### Dr. Nagarajan Ganapathy

Assistant Professor,  
Biomedical Engineering, IIT Hyderabad,  
Kandi, Telangana, India.

## Organizing committee

### Chief Patron

#### Prof. Pramod Kumar Jain

Director,  
Indian Institute of Technology  
(Banaras Hindu University),  
Varanasi 221005.

### Patron

#### Prof. Vikash Kumar Dubey

Dean (Research & Development),  
Indian Institute of Technology  
(Banaras Hindu University),  
Varanasi 221005.

#### Dr. Sanjeev Kumar Mahto

Coordinator,  
School of Biomedical Engineering,  
Indian Institute of Technology  
(Banaras Hindu University),  
Varanasi 221005.

### Targeted participants

Faculty members from nearby colleges  
in engineering discipline

### Venue

Seminar Hall,  
School of Biomedical Engineering,  
Indian Institute of Technology,  
(Banaras Hindu University),  
Varanasi 221005.

### How to apply?

The duly filled registration form can be  
sent on the email id given below:  
[icns2022@itbhu.ac.in](mailto:icns2022@itbhu.ac.in)



SERB Sponsored Training Program

On

# Introduction to Computational Neuroscience



under SERB Scientific Social Responsibility  
Policy (SSR)

September 9, 2022

Last date for registration: 02-09-2022

Event Coordinator

### Dr. Jac Fredo AR

Principal Investigator/Assistant Professor,  
School of Biomedical Engineering,  
Indian Institute of Technology  
(Banaras Hindu University),  
Varanasi 221005.



School of Biomedical Engineering

INDIAN INSTITUTE OF TECHNOLOGY (BANARAS HINDU UNIVERSITY) VARANASI

# About the Institute



IIT (BHU) is an Institute of national importance created by an Act of the Parliament through the Institutes of Technology (Amendment) Act, 2012 vide Gazette Notification dated 29.06.2012. All the IITs are administered centrally by the IIT Council, an apex body established by the Government of India. The Minister of Human Resource & Development, Government of India, is the Chairman of the Council.

# About the Department



The School of Biomedical Engineering was established by the UGC during the Fifth Five Year Plan in the year 1978. Banaras Hindu University is fortunate in having both the Institute of Technology and Institute of Medical Sciences in the same campus. This results in excellent collaborative work related to Biomedical Engineering. The infrastructure development work of the School was started in 1985 with the appointment of core faculty members.

# Introduction & objectives

This training program will focus on signal and image processing trends in analyzing neurological activity of the brain. The principal goal of this workshop is to present a systematic introduction to cognitive imaging and signal analysis. The participants will be introduced to computational and analytical methods for the problems in cognitive neuroscience such as emotion recognition, examination of neurological disorders and clinical decision support.

This workshop will provide a forum to faculty members to interact with eminent speakers and to enhance their cognizance in the field of computational neuroscience: Theory & Computations with applications in science and engineering. Further, this will allow communication of intra and inter disciplinary ideas and will result in acceleration of new collaborations between researchers, neuroscientists and the engineers.

# Agenda

Time	Topic	Speaker
10:00 - 10:30 AM	<b>Inauguration</b>	
10:30 - 11:15 AM	Emerging translational neuroimaging approaches to study neuroscience	Dr. Manoj Kumar
11:15 - 11:30 AM	<b>Tea break</b>	
11:30 - 12:30 PM	Resting state functional MRI: Basics of physiology and connectivity networks	Dr. Manoj Kumar
12:30 - 1:30 PM	<b>Networking Lunch</b>	
1:30 - 3:00 PM	Artificial intelligence applications for clinical decision support in neurology	Dr. Yuvaraj Rajamanickam
3:00 - 3:15 PM	<b>Snacks &amp; Refreshment</b>	
3:15 - 4:15 PM	Validation of electrodermal activity emotion signals with source localized EEG responses	Dr. Nagarajan Ganapathy
4:15 - 4:30 PM	<b>Valediction</b>	

## Notes

- There is **no registration fee**
- The number of participants is limited to 25
- Registration will be on a first come first serve basis

## Participation includes

Certificate hardcopy, scribble pads, lunch along with refreshments

Name	
Designation	
Department	
Institute	
Address	
Email	
Mobile No	
Qualification	
Area of Specialization	
Signature of applicant	
Date	
Recommended and forwarded	
(Signature of Head of the Institution/Head of the Department with seal)	

## Acknowledgment

*Dr. Jac Fredo AR, Principal Investigator is thankful to SERB, Department of Science and Technology, Government of India for providing financial support to this training program through a project grant (File No. SERB/BME21-22/05/321) under SERB Scientific Social Responsibility Policy*