



भारतीय प्रौद्योगिकी संस्थान मंडी

INDIAN INSTITUTE OF TECHNOLOGY MANDI

## Institute Colloquium

“Challenges and research efforts in Democratizing AI”



21st, March, 2025



05:00PM



Auditorium, North  
Campus

**Prof. Chiranjib Bhattacharyya**

Professor, Department of Computer  
Science and Automation,  
Indian Institute of Science, Bengaluru

# Challenges and research efforts in Democratizing AI

Prof. Chiranjib Bhattacharyya

Department of Computer Science and Automation,

Indian Institute of Science, Bengaluru

## Abstract:

The potential of AI to transform our lives crucially depends on building AI models which are both Explainable and Sustainable. In this talk we will first illustrate the challenges in developing Explainable AI models through XraySetu, an Application in MHealth developed during COVID times developed by us. In the second part of the talk we will discuss the problem of reducing the high carbon footprint of Inference in AI models. We will highlight one of our recent result, there are a small number of components in the model which is sufficient for prediction. Using this result we will show how to build models which have lower carbon footprint. Time permitting, we will show how the same result can be broadly useful for other tasks.

## Biosketch:

Prof. Chiranjib Bhattacharyya is currently Professor in the Department of Computer Science and Automation, Indian Institute of Science. His research interests are in foundations of Machine Learning, Optimisation and their applications to Industrial problems. He is fellow of Indian Academy of Engineering, Indian Academy of Sciences and Asia-Pacific Artificial Intelligence Association. He joined the Department of CSA, IISc, in 2002 as an Assistant Professor. Prior to joining the Department, he was a postdoctoral fellow at UC Berkeley. He holds BE and ME degrees, both in Electrical Engineering, from Jadavpur University and the Indian Institute of Science, respectively, and completed his PhD from the Department of Computer Science and Automation, Indian Institute of Science.