### Dr. Mahalingam College of Engineering and Technology, Pollachi-3.

#### Office of Dean Research & Innovation

# Report on the Knowledge Sharing Session on "xAI for ECG Signal Analysis in Heart Disease Identification"

Date: 25.10.2024

**Venue: C 213– EEE Department Conference Hall** 

Resource person: Dr.Malaya Kumar Nath, Head of ECE, NIT, Puducherry

Signal and Image Processing Research Interest group conducted a Knowledge Sharing Session on "xAI for ECG Signal Analysis in Heart Disease Identification". Dr.Malaya Kumar Nath, HoD, Department of ECE, National Institute of Technology, Puducherry was the resource person.

He discussed about the following:

- Introduction to learning i.e Neural network, Machine learning and Explainable AI.
- AI/ML for next-generation computing and Evolution of Artificial Neural network
- Deep learning models, Difference between AI,ML and Deep learning and applications and limitations of AI model are also discussed
- Levels of internal components in DNNs and their comparison are discussed
- Aim of XAI, benefits of XAI for Black box, comparison of XAI methods, XAI concepts and XAI Nomenclature are discussed
- XAI: ECG for Identifying Heart/Cardiac Disorders are also discussed in detail with illustration of one research work

#### **Poster of the event:**





# Dr. MAHALINGAM COLLEGE OF ENGINEERING AND TECHNOLOGY



are approved | Administration to



# Department of Electronics and Communication Engineering &

Office of Dean Research & Innovation



RESEARCH INTEREST GROUP

"Signal & Image Processing"

**Knowlegde Sharing Session** 



Dr. Malaya Kumar Nath,
Assistant Professor,
Head of ECE
Department of ECE,
NIT, Puducherry

"xAI for ECG Signal Analysis in Heart Disease Identification"

25/10/2024 @ 10.00 am

Venue: C213 EEE Department Conference Hall

Organizer(s): 1. Dr.R. Sudhakar 2. Dr. S. Bharathi

All are cordially Invited !!!

Collaborate, Innovate, Elevate: Research Excellence...



### Photos taken during the Session:





Dean R&I

S. Runk record

Principal

--Sd--Secretary