### BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT



Autonomous Institute Under VTU, Accredited by NBA and NAAC Yelahanka, Bengaluru-560119.

## Name of the Club:

IEEE Information Theory Society (ITS) BMSIT Student Branch

**Date of Formation:** 

August 2023

**Coordinator:** 

Dr. Shoba M, ISE

**Objective:** 

Advancing the theoretical and applied aspects of Information Technology.

**Frequency of Meeting:** 

Two team meetings per month, and an Annual General Meeting with all ITS members.

Social media link:

Instagram: <a href="https://www.instagram.com/its-bmsit/">https://www.instagram.com/its-bmsit/</a>

**Contact:** 

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# Roles and Responsibilities:

Our society encompasses the processing, transmission, storage, and use of information, and the foundations of the communication process. It specifically encompasses theoretical and certain applied aspects of coding, communications and communications networks, complexity and cryptography, detection and estimation, learning, Shannon Theory, and stochastic processes. The society promotes the theory and practice of information technology by fostering research, education, and the exchange of technical information through conferences, publications, and other activities.

### **One Year Activities conducted:**

### **Hack The Halls**

On December 23 and 24, 2024, BMSIT&M hosted Hack The Halls, Our Christmas-themed technical event organized in collaboration with IEEE CS. Day 1 was a Debugging Challenge

where participants showcased their problem-solving skills by identifying and fixing code errors. Day 2 featured Coding Roulette, an exciting coding relay challenge that tested teamwork and adaptability.

## **IEEE Annual General Meet**

Our Annual General Meet brought together the members of IEEE for a day of networking and presentations. The event featured leaders from each society who highlighted the year's achievements and future directions for our IEEE chapter.

# **IEEE Open Day**

On March 21<sup>st</sup> 2025, IEEE Information Theory Society BMSIT&M showcased its flagship project *OntoHDClass*. Centered around the theme "Ontology-Driven Intelligence for High-Dimensional Data," we presented OntoHDClass—a novel classification framework combining semantic similarity measures and Recurrent Neural Networks (RNN) to enhance subspace clustering in sparse, high-dimensional datasets. Our demonstration featured an intelligent E-book Recommendation System enriched by GPT-3.5, **TF-IDF**, and LDA, illustrating how ontological knowledge and information-theoretic techniques can drive smarter decision-making. The project drew significant engagement from researchers and students alike, with performance metrics surpassing conventional models like **DBScan** and **SVM+Naïve Bayes**. Through this initiative, IEEE ITS BMSIT&M reaffirmed its dedication to advancing the frontiers of information theory and intelligent systems.

# **Meet The Team**



# **IEEE Open Day**



**IEEE Annual General Meet** 



**Hack The Halls** 



# **OntoHDClass**



