INSA Distinguished Lecture-1 (2025)
to
Dr Sriparna Saha

CITATION

INSA Distinguished Lectures were established in 2024 in recognition of the notable contributions made by the scientists in specific subject areas related to science and technology. Maximum of twenty INSA Distinguished Lecture Fellowships, ten in IDL-1 and ten in IDL-2, will be given each year. IDL-1 is only for the current INSA Young Associates, INSA Associate Fellows and INYAS Members and IDL-2 is only for INSA Fellows except those covered under IDL-1.

INSA Distinguished Lecture-1 Fellowship for the year 2025 under Engineering & Technology has been awarded to Dr Sriparna Saha, Associate Professor, Department of Computer Science and Engineering, Indian Institute of Technology Patna for her researches in Multimodal Information Processing, leveraging deep-learning architectures to integrate data from text, image, audio, and video.

Dr Saha's work encompasses designing sentiment and emotion-aware dialogue systems, developing models for disease prognosis, hate speech detection in low-resource languages, depression detection, recommendation systems, designing models for multimodal multilingual summarization systems, complaint mining, fake-news detection and mitigation, and designing task-oriented dialogue systems in healthcare and sales. Her key innovations include designing a virtual doctor for healthcare symptom analysis and a virtual agent for mental health support. She has published extensively in top-tier conferences, developed valuable natural-language-processing (NLP) resources, and created significant datasets like M3LS, the largest multilingual multimodal summarization dataset. Her ongoing research focuses on models combining textual and visual modalities for generating effective trust-worthy personalized summarization and Vet-LLM: a small domain-specific LLM for Veterinary Science.

During her PhD, Dr Saha developed the Archived-Multiobjective-Simulated-Annealing (AMOSA) technique. Her work, published in *IEEE Transactions-on-Evolutionary-Computation,* earned accolades, leading to awards, fellowships, and postdoctoral research in Germany and Italy. She also explores text mining and multimodal information processing for NLP and bioinformatics. Her projects, supported by government and industry collaborations with firms like Elsevier, Accenture, Microsoft, ADOBE, and Samsung, cover dialogue systems, multimodal summarization, financial NLP, and recommendation systems.

Dr Saha serves as Associate Editor for several prestigious journals, including three IEEE transactions, area-editor of Pattern-Recognition-Letters and contributes significantly to NLP, AI, ML, generative-AI solidifying her reputation as a leader in her field.