

# WINTER SCHOOL ON SPEECH AND AUDIO PROCESSING (WISSAP-2024) MULTILINGUAL SPEECH PROCESSING OF INDIC LANGUAGES



Koneru Lakshmaiah Education Foundation, Vaddeswaram - 522302, Andhra Pradesh, India

### EVENT SUMMARY

Koneru Lakshmaiah Education Foundation is hosting WiSSAP-2024 from December 09-12, 2024, focusing on "Multilingual Speech Processing of Indic Languages". The event addresses India's linguistic complexity, spanning 11 classical, 22 official, and thousands of other languages spoken by 145 crore people. WiSSAP aims to bring together experts, researchers, and students to discuss fundamental and practical aspects of multilingual speech processing systems. Targeted at academic and research professionals, the winter school will feature invited talks, research presentations, and discussions on speech and audio processing challenges. This 17th edition of the annual event provides a platform for exploring cutting-edge developments in the field

### ESTEEMED GUESTS



Dr. Bayya Yegnanarayana (IIIT) Hyderabad



Dr. Shyam S Agrawal KIIT Gurgaon



Dr. Swaran Lata MeitY New Delhi

#### INVITED SPEAKERS



Dr. Hema A Murthy IIT Madras



Dr. Anusha Prakash Independent Researcher



Dr. C. Chandra Sekhar IIT Madras



Dr. Sriram Ganapathy
IISc Bengaluru



Dr. P Vijayalakshmi SSNCE Chennai



Prof. Nixon Patel IIT Hyderabad



Dr. Hemant A. Patil DA-IICT Gandhinagar



Pranaw Kumar CDAC Mumbai



Dr. S Umesh IIT Madras



Dr. K Sri Rama Murthy IIT Hyderabad



Dileep A D
IIT Dharwad



Dr. Arun Sankar M S SETU, Ireland



Dr. Debamalya Chakraborty Amazon Alexa, Bengaluru



Dr. Sreeram Ganji Reliance Jio AICoE



Dr. Jagabandhu Mishra UEF Finland



Dr. Govind D KLEF Vaddeswaram



Dr. Rajeev Aravindakshan AIIMS Mangalagiri



Dr. Rakesh U K AIIMS Mangalagiri

For Registration Please Visit:

https://wissap24.kluniversity.in/

# Contact:

wissap24@kluniversity.in





	Time	December 9 (Day 1)	December 10 (Day 2)	December 11 (Day 3)	December 12 (Day 4)
	08:00 a.m - 09:00 a.m	Registration			
	09:00 a.m - 10:30 a.m	Inaugural Function	Quantum Leap in Speech Recognition - Beyond Gen-Al and LLMs • Prof. Nixon Patel (9:00 a.m - 9:30 a.m)	Speech recognition in noisy environments: Focus on far field and call communications  • Vikram C M	Implicit Processing of Speech for Spoken Language Diarization Dr. Jagabandhu Mishra
			Multi-Lingual Audio Deepfake Detection Corpus Dr. Hemant A. Patil (09:30 a.m - 10:30 a.m)		Processing of speech recorded from stroke patients  • Dr. Govind D
	10:30 a.m - 11:00 a.m	HI Tea	Meet & Greet	Mingling Moment	
	11:00 a.m - 12:00 a.m	Importance of phase in speech signal processing.  • Dr. Bayya Yegnanarayana	Development of Text to Speech Synthesis System for Santhali - A Low Resource Language • Pranaw Kumar	Attentive Multilingual Speech Encoder for Zero-Prior ASR  • Dr. Debamalya Chakraborty (11:00 a.m 12:30 p.m)	Mingling Moment
					Approaches to recording and processing of voice samples of neurological patients  Dr. Rajeev Aravindakshan
	12:00 a.m - 1:00 p.m	A multilingual perspective to TTS systems for Indian languages.  • Dr. Hema A Murthy &	Recent Efforts for Automatic Speech Recognition (ASR) in Indian Languages • Dr. S Umesh		
		Dr. Anusha Prakash		Lunch Break ( 12:30 p.m - 02:00 p.m )	Lunch Break (12:30 p.m - 2:00 p.m)
	1:00 p.m - 02:30 p.m	Lunch Break	Lunch Break	Learning for machines: Insights from acoustic	Insights into Speech Disorders: Bridging Research and Practice • Dr. Rakesh U K
		Advances in Deep Learning Models	Speech Processing using Deep Neural Networks (DNN) • Dr. K Sri Rama Murthy	<ul><li>analyses</li><li>Priyankoo Sarmah</li></ul>	
		• Dr. C. Chandra Sekhar		Advancing Text-to-Speech Technology for Indic Languages: Motivation, Architectural Frameworks, and Performance Evaluation Dr. Sreeram Ganji (03:00 p.m - 04:30 p.m)	Round Table Discussion
	03:30p.m -04:30 p.m	Representation Learning For Emotional Artificial Intelligence • Dr. Sriram Ganapathy	Spoken Language Identification Techniques for Indian Languages Dileep A D		
	04:30 p.m -05:00 p.m	Refreshment Break	snack interval	Snack Interval	Valedictory Function
	05:00 p.m -06:00 p.m	Assistive speech technologies  • Dr. P Vijayalaksmi	Securing the Audio Domain: Cyber Threats and Effective Mitigation Strategies  • Dr. Arun Sankar M S	Poster Presentation by Research Scholars (05:00 p.m - 06:30 p.m )	cion by Research
Tree.	06:00 p.m onwards		Ideas & Appetites	Cultural Night	HI Tea

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