

## Winter School on Speech and Audio Processing

### WiSSAP 2019

#### About

WiSSAP started in 2006, has become the flagship programme for the speech and audio research community in India, organized every year. The who's who of the Indian speech and audio research groups from top institutes in India, including IISc and IITs, and industry representatives from R&D teams, attend WiSSAP. It also witnesses participation from budding speech and audio researchers pursuing PhD and Masters.

This years' theme is: "**Deep dive into brain and machine perception: Bridging the gap in speech processing**". Given that we are just beginning to use speech as an effective means of human-machine interaction and given your company's interest in artificial intelligence, speech research and product development, I am confident that your team will be interested in engaging with the speech and audio community of India. The topics of focus will include: speech perception and learning, role of attention in listening, deep learning and state-of-the-art in machine speech perception, drawing connections between human and machine perception. These will span talks and discussions from brain science to engineering system building and deployment.

We at WiSSAP would like to invite you to participate. We will also encourage you to consider sponsoring the beautifully crafted and eagerly awaited 14th WiSSAP being held in Trivandrum, from 27th to 29th of January 2019. The WiSSAP 2019 programme is hosted at: <https://wissap.github.io/2019/>

#### Call for Sponsors

Category	Amount
Platinum	100,000 INR
Gold	75,000 INR
Silver	50,000 INR
Bronze	25,000 INR

#### Sponsorship benefits

Special mention in the webpage, social media tweets and articles in Science and Technology Communication, event banners in the venue and digital copies of flyers, and WiSSAP goodies, and Student Career Interaction by having desks at tea and lunch sessions. Also, we will have complimentary registration tickets: Bronze gets 1, Silver gets 2, Gold gets 3 and Platinum gets 5.

#### Contact details

Send email to [wissap20xx@gmail.com](mailto:wissap20xx@gmail.com)

#### Current List of Sponsors

Bronze Sponsor - IEEE Signal Processing Society, Kerala Chapter

Silver Sponsor - IEEE Signal Processing Society, Bangalore Chapter

# Winter School on Speech and Audio Processing (WiSSAP) 2019

Venue

27th-29th January, 2019

College of Engineering Trivandrum (CET)  
Kerala, India

## Theme

### Deep dive into brain and machine perception: Bridging the gap in speech processing

With the advent of techniques to capture sensory signals associated with speech cognition and computational approaches to analyze these signals, curiosity to strengthen our understanding of human speech processing has increased. In this WiSSAP, we will meet to dive deeper into these and related topics, and identify how the insights can aid in design of machine systems for robust speech processing.

## Focus

- speech perception and learning
- role of attention in listening
- deep learning and state-of-the-art in machine speech perception
- drawing connections between human and machine perception

## Programme

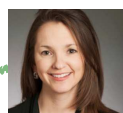
- Invited talks
- Tutorials
- Research Scholars' Symposium
- Panel Discussions

Three day school will see participation from researchers working in academia and industry, analyzing speech cognition via experimentation on the human brain and building state-of-the-art speech recognition systems.

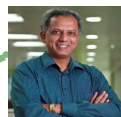
## Invited Speakers



Dr. Ratnavalli Ellajosyula, Manipal Hospital & Annasawmy Mudaliar General Hospital|  
**Bilingualism and dementia: The vulnerable second language**



Dr. Lori L. Holt, Carnegie Mellon University, Pittsburgh|  
**Understanding how humans interpret the complexity of spoken language**



Dr. V. Ramasubramanian, IIT Bangalore|  
**Deep Learning: The biology and mathematics beneath**



Dr. Jithendra Vepa, Observe AI, Bangalore|  
**ASR system design**



Dr. Deepu Vijayasenan, NIT Surathkal, Karnataka|  
**Speaker diarization and speech recognition system design**



Dr. Chandra S Seelamantula, IISc Bangalore|  
**Learning to do sparse coding**



Dr. Rajakrishnan Rajkumar, IISER Bhopal|  
**Eye movements in the perception of Indian languages**



Dr. Barbara Shinn-Cunningham, Carnegie Mellon University, Pittsburgh|  
**Role of attention mechanisms in listening**



Dr. Tijmen Tieleman, minds.ai|  
**Getting creative with autoencoders**



Online Registration Open.  
Limited Seats.

<https://wissap.github.io/2019/>

## Program Committee

T. V. Sreenivas | IISc, Bangalore  
Chandra Sekhar Seelamantula | IISc, Bangalore  
Padmanabhan Rajan | IIT Mandi

Suresh Kumaraswamy | CET, Kerala  
Sriram Ganapathy | IISc, Bangalore  
Neeraj Sharma | CMU, Pittsburgh  
Prasanta Kumar Ghosh | IISc, Bangalore