



**INDIRA GANDHI DELHI TECHNICAL UNIVERSITY FOR WOMEN**  
(ESTABLISHED BY GOVT. OF DELHI VIDE ACT 09 OF 2012)  
ISO 9001:2015 CERTIFIED UNIVERSITY  
KASHMERE GATE, DELHI-110006

WOMEN EDUCATION | WOMEN ENLIGHTENMENT | WOMEN EMPOWERMENT

**6<sup>TH</sup> INTERNATIONAL CONFERENCE ON  
ARTIFICIAL INTELLIGENCE AND SPEECH TECHNOLOGY**

13<sup>th</sup> - 14<sup>th</sup> November, 2024

**AIIST 2024**

After the grand success of five versions of International Conference on Artificial Intelligence and Speech Technology (AIIST2019, AIIST2020, AIIST2021, AIIST2022 and AIIST 2023), Indira Gandhi Delhi Technical University for Women, Delhi is all set and ready for hosting its sixth version i.e. 6th International Conference on Artificial Intelligence and Speech Technology (AIIST2024) on 13th - 14th November, 2024 at IGDTUW Campus, Delhi. Last five Conference witnessed a number of Expert Researchers, Academicians and Industry practitioners in AI and Speech Domain from premier Institutions in India and abroad including Japan, Australia, France, Germany, Hungary, Czech Republic, Myanmar, Uzbekistan, Austria, Vietnam and others.

**ABOUT IGDTUW**

Indira Gandhi Delhi Technical University for Women (IGDTUW) was established by the Govt. NCT of Delhi in May, 2013 vide Delhi Act 09 of 2012, as a non-affiliating University to facilitate and promote studies, research, technology, innovation, incubation and extension work in emerging areas of professional education among women, with focus on engineering, technology, applied sciences, architecture and its allied areas with the objective to achieve excellence in these fields.

**IMPORTANT DATES**

**Paper Submission: 30th August, 2024**  
**Acceptance Notification: 30th September, 2024**  
**Registration: 21st October, 2024**  
**Conference Dates: 13th - 14th November, 2024**

**CALL FOR PAPERS**

Papers are invited in these tracks:

- Track 1 - Spoken Language Processing**
- Track 2 - Speech Recognition Signal Processing**
- Track 3 - Trends and applications in speech technology**
- Track 4 - Multi-lingual language translation and assessment**
- Track 5 - NLP and AI**
- Track 6 - Understanding large language models**
- Track 7 - Computer vision and AI**

**TUTORIAL SESSION**

- Hands-on Sessions by Renowned Researchers**
- **Tools and Techniques for Speech Processing and Database Development**
  - **Deep Learning and Machine Learning models for NLP and Speech**

**TECHNICALLY SPONSORS**



**SUBMIT PAPER HERE**

All accepted and presented papers of the conference by duly registered authors will be submitted to Springer CCIS for Publication.

**PUBLICATION**



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# KEYNOTE SPEAKERS



**Prof. Bjoern Schuller**  
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United Kingdom



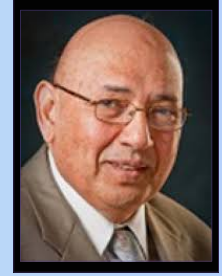
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## TRACKS



### SPOKEN LANGUAGE PROCESSING

- Speech-to-Speech Translation
- Spoken Dialogue Systems
- Spoken Language Recognition and Understanding
- Speech and Language Resources – Data Collection, Transcription and Annotation
- Computational Resource Constrained Speech
- Emotions detection and recognition
- Speech processing tools for dialectic languages
- Accent recognition and verification

### SPEECH RECOGNITION-SIGNAL

#### PROCESSING, ACOUSTIC MODELLING, LANGUAGE MODELLING

- Speech Analysis, Representation and Models
- Speech Enhancement
- Text to speech synthesis
- Affective Speech Recognition, Interpretation and Synthesis
- Generate Audio fingerprints
- Automated music tags

### TRENDS AND APPLICATIONS IN SPEECH TECHNOLOGY

- Forensic Speech Investigations and Security Systems
- Speaker Recognition in Biometric Systems and Security
- Speech Interface Design and Human Factors Engineering
- Human Computer Interaction
- Assistive Technologies
- Applications of Modelling, Simulation and Verification in Automotive

### MULTI-LINGUAL LANGUAGE

#### TRANSLATION AND ASSESSMENT

- Multi-lingual language analysis
- Multilingual document collection
- Speech/Text Language translation

- Assessment tools for language proficiency
- Translation tools for low resource languages
- Designing speech/text corpora
- Narrative speech
- Speech perception concepts
- Phonetic/Phonological Systems

### NATURAL LANGUAGE PROCESSING AND ARTIFICIAL INTELLIGENCE

- Multimodal Information Retrieval
- Multivariate Information Analysis
- Natural Language Processing based tools and Applications
- Text extraction and Topic classification
- Name Entity Processing
- Sentiment analysis
- Chatbots

### UNDERSTANDING LARGE LANGUAGE MODELS

- Speech Recognition with LLMs:
- Text-to-Speech Synthesis:
- Conversational Speech Generation
- Adapting LLMs for Speech Tasks
- Speech Data Collection and Annotation
- Human-Machine Interaction and Large Language Models:
- Applications of ChatGPT in Conversational AI:
- Transfer Learning and Fine-Tuning Techniques for ChatGPT

### COMPUTER VISION AND AI

- Deep Learning for Image Recognition
- Multimodal AI: Integrating Vision and Speech
- Generative Adversarial Networks (GANs) in Computer Vision
- Medical Imaging and AI
- AI for Content Creation and Augmentation
- Computer Vision and Speech Recognition
- Compressed Sensing (for Speech and/or Image Processing)

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EMAIL ID : [aist2024@igdtuw.ac.in](mailto:aist2024@igdtuw.ac.in)