Special Session

Title of the Special Session: Speech Processing in HealthCare

Objective of the Special Session: One of the best techniques to improve human interaction and understanding of human emotions is to improve human speech; henceforth, the idea of human-machine communication, which led to automatic speech/voice recognition, has revolutionised healthcare in the realm of speech. Speech recognition demands a high level of intelligence and fault tolerance in the pattern recognition algorithms since the speech waveform is nonlinear and time-variant. This special session's aim is to help researchers describe their areas of study, explain how AI and ML speech techniques and architecture are applied in the healthcare industries, and provide light on potential future applications and developments. Segment 1: Advanced Techniques of Speech Processing; Segment 2: Speech Disorders; Segment 3: Speech in Smart Healthcare Applications.

Topics of the Special Session:

- AI/ML for speech signal processing
- Spectrum analysis for speech signal
- Speech disorder
- Psychological disorders
- Pathologic Speech
- Dysarthria, Parkinson, Alzheimer, Traumatic Brain injury
- Voice Analysis
- Application of AI in child healthcare
- Human communication in healthcare
- Optimal speech in smart healthcare application
- Advanced Tool for Speech Signal Processing
- Biomedical Signal Analysis
- DSP Architectures for healthcare

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