List of Projects in the Area of Speech Technology

Any one of the features : STFT, MFCC, LPCC, ZFF, Single Frequency, group Delay
Model : Neural network (DNN) models
Evaluation: Toolbox

Speech Signal Processing (Bhanuteja Nellore, 9908041494, bhanu.nellore@research.iiit.ac.in)

1. Voice/Unvoiced classification using Zero Frequency Filter
2. Robust spectral estimation noise (ZTL/LP/STFT)
3. Speech Enhancement using spectral subtraction

Speaker Separation (Sushmita T, 9949027610, sushmita.t@research.iiit.ac.in)

1. Speaker separation using supervised Non-Negative Matrix factorization (NMF)
2. Speaker Separation by Time-Frequency Masking
3. Beamforming techniques for speaker separation
4. Speech separation using Independent Component Analysis (ICA)

Speech Synthesis Systems (Botsa Kishore Kumar, 7396016979, kishore.botsa@research.iiit.ac.in)

1. Build a speech synthesis system using Merlin Tool Kit (for any one of the languages either English or Hindi)

2. Build a speech synthesis system using any one of the Neural Networks (NN) (either Convolutional NN, Recurrent NN for any one of the languages either English or Hindi)

Speech Recognition (Rashmi Ketthireddy, 9000149693, rashmi.kethireddy@research.iiit.ac.in)

1. Automatic speech recognition using Kaldi toolkit for TIMIT Database
2. End-to-End Speech Recognition using Deep RNN Models (EESEN) for TIMIT database