

What are the algorithms used for Speech recognition in Arabic?

Arabic Automatic Speech Recognition(with Deep Learning) (AASR):-

Some popular techniques used in ASR and AASR are artificial neural networks, dynamic time warping and Hidden Markov modeling.

speech recognition systems can be classified in different classes based on what type of utterances they can recognize.

Those are of four types:

1. isolated words
2. connected words
3. connected speech
4. spontaneous speech.

AASR Deep Learning Techniques:-

Deep learning has different techniques which can be applied on AASR. we focus on the artificial neural network technique.

We cover the main types of artificial neural network (ANN):

1. Neural Networks.
2. Recurrent Neural Networks.
3. Deep Neural Networks.

AASR with Deep Learning Services:-

Speech recognition using deep-learning is a huge task that its success depends on the availability of a large repository of a training dataset.

The availability of open-source deep-learning enabled frameworks and Application Programming Interfaces (API) would boost the development and research of AASR.

There are multiple services and frameworks that provide developers with powerful deep-learning abilities for speech recognition:

1. API Services.
2. Toolkits.
3. Frameworks.

References:-

[https://www.researchgate.net/publication/334353626 Arabic Speech Recognition with Deep Learning A Review](https://www.researchgate.net/publication/334353626_Arabic_Speech_Recognition_with_Deep_Learning_A_Review) .