An Effort Towards Improving Automatic-Transcription Systems

Publisher: IEEE

Cite This

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Abstract:

The automatic speech recognition (ASR) system is a modern popular emerging technological system with lots of scope for applications in different domains. However, developing a mature ASR system needs to address lots of challenges to accommodate the diversity of the accents of speakers from diverse countries, regions, communities, languages, dialects and many more. This work is an effort to understand the different aspects of improving modern automatic transcription systems. The performance on significant aspects like Accent detection, Gender Detection and Voice Recognition across five major audio features have been captured, analyzed and studied. Standard machine learning architecture has been applied to analyze the features and determine their impact on the performance of the transcription system. We observed a high level of accuracy on combined features and hope this study will help those who are working in ASR, and NLP.

Published in: 2022 International Interdisciplinary Conference on Mathematics, Engineering and Science (MESIICON)

Date of Conference: 11-12 November 2022

INSPEC Accession Number: 22932513

Date Added to IEEE *Xplore*: 10 April 2023

DOI: 10.1109/MESIICON55227.2022.10093297

ISBN Information:

Publisher: IEEE