



Projection of the corpus for the speech recognition service from standard French to French regional accents in field of French media

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Abstract:

Standard French means French pronounced without any regional accent and whose syntax, morphology and spelling are described in dictionaries, grammar books and textbooks. Although standard French is taught at school and used in written communication, administrative documentation and Radio/TV national channels, most of regional and local Radio/TV channels as well as specific shows promoting touristic areas can typically carry out regional French accents. In this work, we focus on the problem of speech recognition service for the French media. Our goal is to build useful resources to extend language models that can be used in speech recognition APIs. Over the past few years, the APIs for automated speech recognition (ASR) are playing an increasing crucial role for a variety of media applications. In this paper, we present a lightweight open source framework STT-FTV that allows users to easily connect 4 different ASR tools to be trained with different French regional accents. The speech corpus has been collected and transcribed from various TV and radio contents especially fit in order to represent the major differences with the standard French. This STT-FTV system offers a relative reduction of the Word Error Rate in the context of regional accent transcription.

Biography:

Matthieu Parmentier started his audio career recording classical music CDs. He joined France Televisions - the French public broadcaster - in 1999 as a sound engineer for live programs and started the management of 3D audio, UHD video and metadata projects eight years later. Matthieu is a board member of the EBU Production Strategic Program which embraces audio, video and metadata topics, and co-chairs the Audio Engineering Society Technical Committee for Broadcast and Online Delivery. He chairs or participates in several collaborative R&D projects. He holds two license degrees in sound recording and video post-production and a master degree in audiovisual research from the Toulouse II University. Amel Mhamdi, completed his PhD at the age of 31 years from FSEG University of Tunisia and member of LIMTIC research laboratory. She has worked since 2016 until 2018 in the banking sector for the



establishment of artificial intelligence service in finance innovation projects especially on the subject of Deals and banking reconciliation with Natixis-Paris and on the subject credit automation with BNP-Paribas. Since 2019, she has been focusing on the mapping and industrialization of IA research and media innovation projects with France-Télévision. She has published more than 7 papers in reputed conferences and journals.

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