



## Automatic speech recognition for French regional accents in field of French media

**Matthieu Parmentier**

*France Televisions, 75015 Paris, France*

### 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 Tech-



nical 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.

### Publication of speakers:

1. American Society of Health-System Pharmacists, "Drug Shortages Statistics," <https://www.ashp.org/Drug-Shortages/Shortage-Resources/Drug-Shortages-Statistics>, accessed June 17, 2020.
2. Centers for Disease Control and Prevention, "Drug Overdose Deaths," <https://www.cdc.gov/drugoverdose/data/statedeaths.html#:~:text=In%202018%2C%2067%2C%20367%20drug%20overdose,driver%20of%20drug%20overdose%20deaths>, accessed June 17, 2020.
3. The Council of Economic Advisers, "The Underestimated Cost of the Opioid Crisis," <https://www.whitehouse.gov/sites/whitehouse.gov/files/images/The%20Underestimated%20Cost%20of%20the%20Opioid%20Crisis.pdf>, November 2017.
4. Protenus, "2019 Drug Diversion Digest," <https://www.protenus.com/resources/2019-drug-diversion-digest/>, accessed June 17, 2020

[International Conference on Automation and Artificial Intelligence | May 21, 2020 | London, UK](#)

**Citation:** Matthieu Parmentier; Automatic speech recognition for French regional accents in field of French media; Artificial Intelligence 2020; May 21, 2020; London, UK