SUPERVISED LEARNING FOR GENRE CLASSIFICATION OF AUDIO TRACKS

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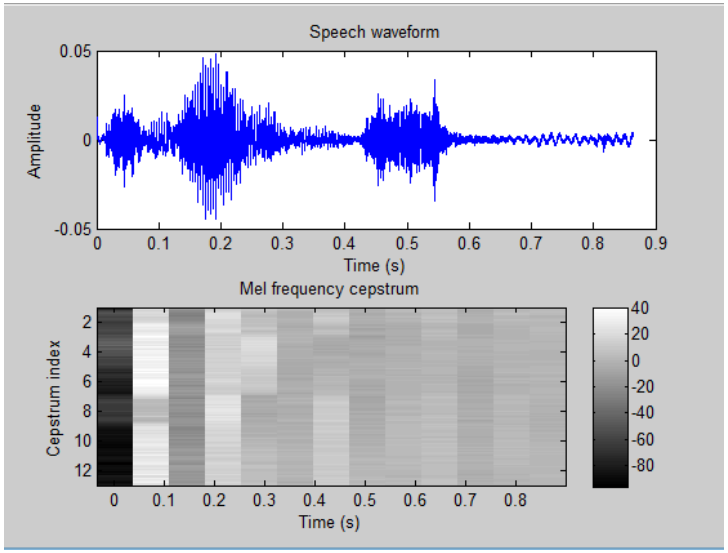
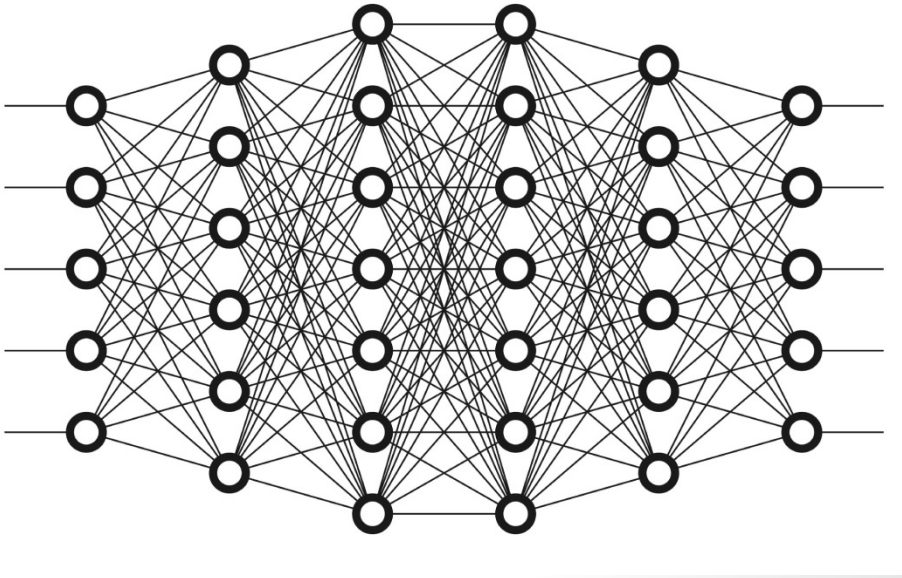
Context and motivation

History

State of the art



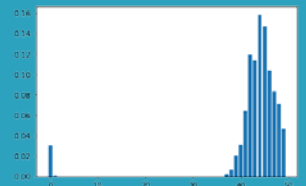


Method whole overview

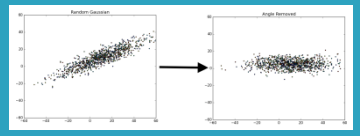
RAW SONG

MFCC

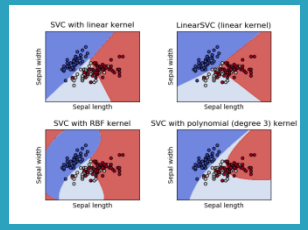
HISTOGRAMS



PCA



LEARNING

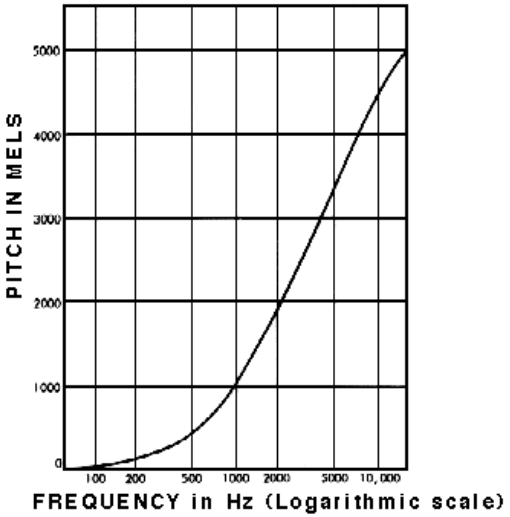


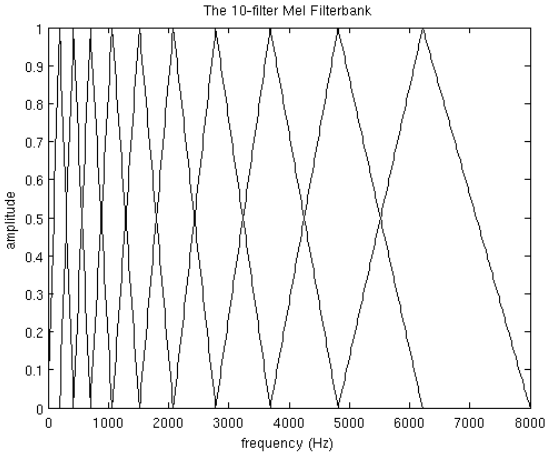
GENRE

Method: MFCC

Mel Scale

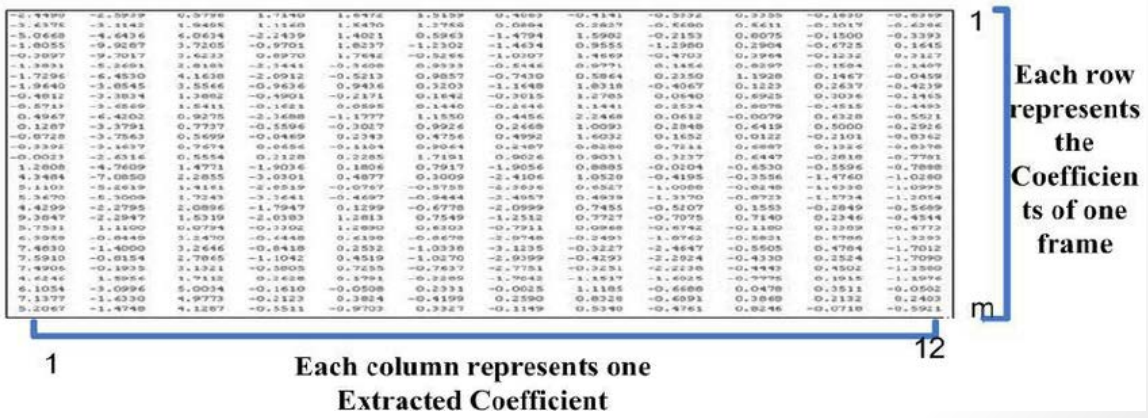
$$m = 2595 \cdot \log_{10}\left(1 + \frac{F}{7000}\right)$$



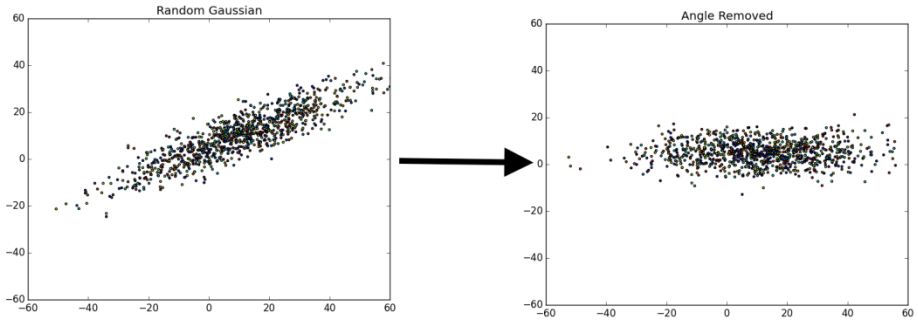


Method: MFCC

$$C_n = \sum_{k-1}^{k} (logD_k) \cos\left[m(k - \frac{1}{2})\frac{\pi}{k}\right]$$



Method: PCA and Feature representation



Method: PCA and Feature representation

Method: learning schemes

Results: Data

Genres

Blues	Jazz
Classical	Metal
Country	Pop
Disco	Reggae
Hip hop	Rock

Properties

- **Sample rate:** 22050Hz
- **Channels:** 1 (Mono)
- **Frame rate:** 22050 fps

Results: Evaluation protocol and method parameters.

Results: Discussion

Results: Discussion

Results: Discussion

Conclussion and future work

Thanks for your attention!