# Audio Data Augmentation Libraries in Python

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### Audio data augmentation libraries in Python

- librosa
- audiomentations
- torch-audiomentations
- torchaudio.transforms

#### Librosa

- Amazing audio processing library
- Open source
- Time stretch / pitch shift
- Offline augmentation

### audiomentations

- Open source
- Loads of transformations (raw audio + spectrograms)
- Supports augmentation chains (compositions)
- Online and offline augmentation
- Integrates with Keras / PyTorch
- CPU only

### torch-audiomentations

- Open source
- Inspired to audiomentations
- Focused on PyTorch
- GPU processing
- Online augmentation
- Decent number of transformations

#### Torchaudio

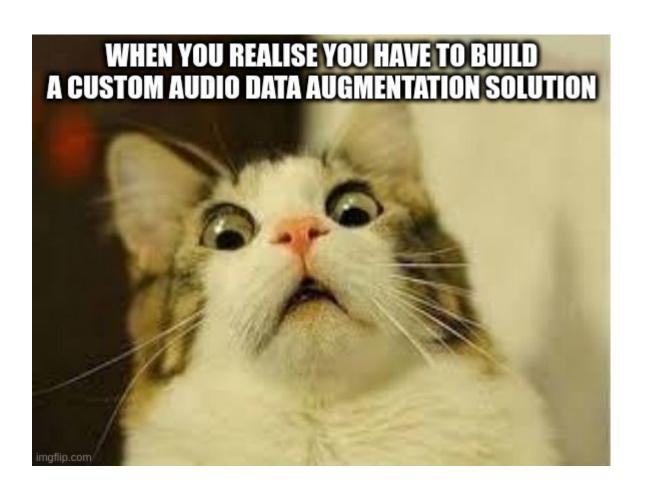
- Open source
- Time / frequency masking, time stretch, pitch shift
- Supports augmentation chains
- Perfectly integrated with PyTorch
- Online augmentation
- Runs on GPU

Minimal data augmentation needs -> librosa

- Minimal data augmentation needs -> librosa
- Using PyTorch -> torchaudio

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- Using PyTorch -> torchaudio
- Using PyTorch and need more transforms -> torch-audiomentations

- Minimal data augmentation needs -> librosa
- Using PyTorch -> torchaudio
- Using PyTorch and need more transforms -> torch-audiomentations
- Complex augmentation needs -> audiomentations



# Join the community!



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