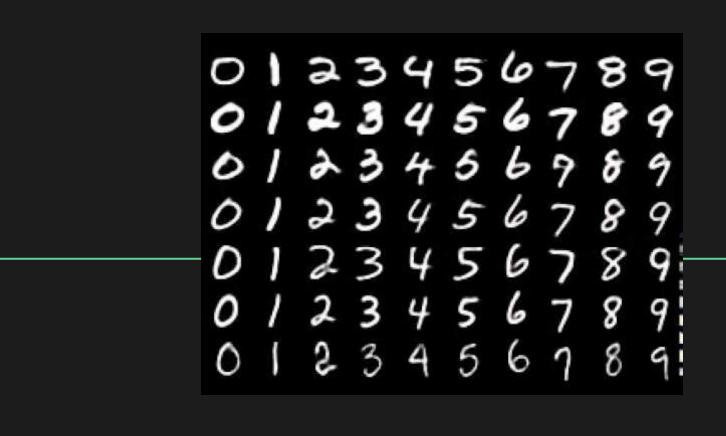
Classifying AudioMNIST using PyTorch

Jay Rodge
Illinois Institute of Technology





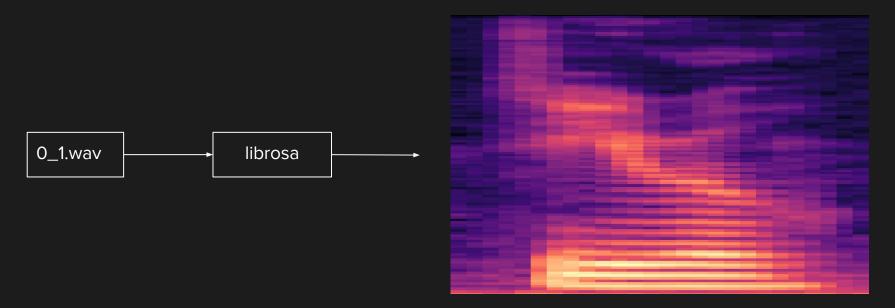
Audio-MNIST

Audio-MNIST

- 0-9 digits spoken by various people from different country
- 3000 audio samples for each class
- 30000 audio files in total

Spectrograms

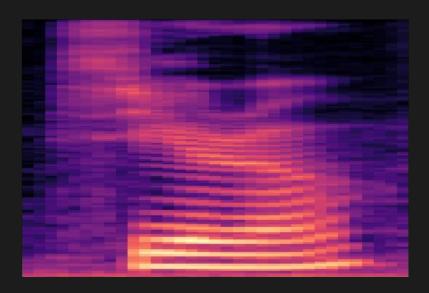
Spectrogram



Spectrogram

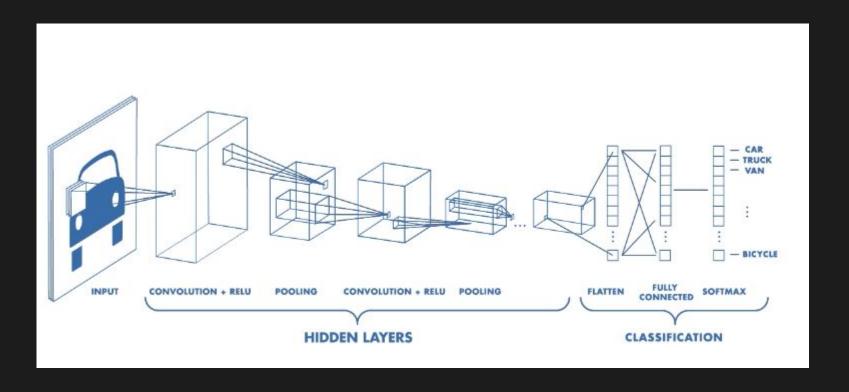
Librosa

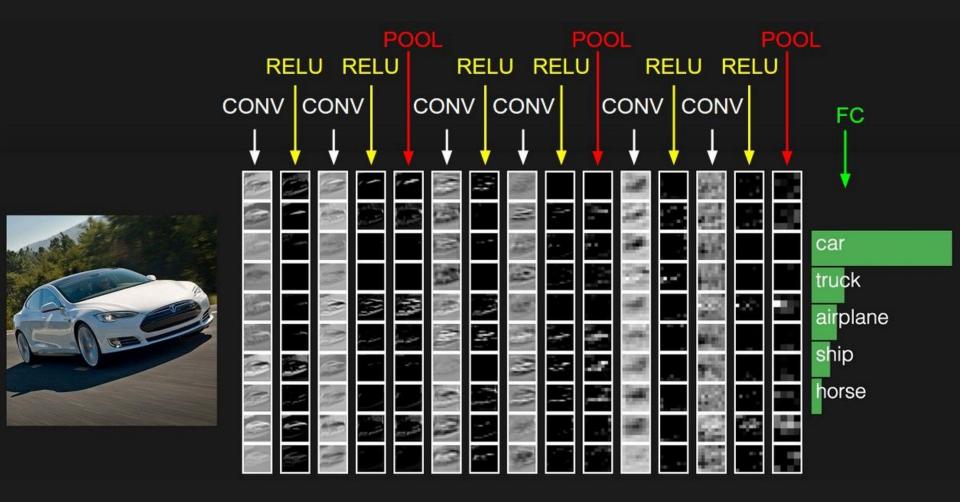
```
y, sr = librosa.load('0_1.wav')
data = librosa.feature.melspectrogram(y=y, sr=sr)
librosa.display.specshow(librosa.power_to_db(data,ref=np.max), y_axis='mel', fmax=8000, x_axis='time')
```





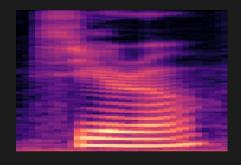
Convolutional Neural Network(CNNs)





O PyTorch

Data Model Framwework



CNN







Thank You!

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