Congratulations! You passed!

Grade received 100% **To pass** 80% or higher

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Different Data Types

Total points 3

1. Visualizing an audio signal in the time domain usually reveals very little information on its spectral content. Which graphical representation displays the amplitude changes for each frequency as a function of time? **1 / 1 point**

- (•) Spectrogram.
- ( ) librosa
- ( ) Feature normalization
- ( ) Short-Time Fourier Transform.

Correct
Spot on! Check this page for more information on spectrograms.

2. What would be a striking caveat or shortcoming of interpreting a video just as a series of images? **1 / 1 point**

- ( ) Hindering classifier accuracy.
- ( ) Unnecessarily increasing the dimensionality of the dataset.
- ( ) Considering that all subsequent frames are correlated.
- (•) Losing the semantic context coming from the sequence of events.

Correct
Correct! Videos are time series as well and thus the ordering of events matter a great deal.

3. In the analysis of the weather time series data set you saw that the samples were acquired at a rate of 6 samples per hour. You also know that weather changes typically occur on a much slower time scale. What is a valid sampling strategy to make predictions into the future for this specific case? **1 / 1 point**

- ( ) Omitting samples.
- ( ) Use one sample at a time to make predictions.
- (•) Windowing and omitting samples.
- ( ) Upsampling by interpolation.

Correct
Right on! Taking a finite window of data plus downsampling is the way to go for slow time varying signals.