

Report 2018/11/06

1. 音声ファイルをダウンロードせよ。 Download a waveform file.

<https://sites.google.com/site/shinnosuketakamichi/lecture> 20181106.wav

2. Google Colabのノートブックを立ち上げよ。 Open a new Google Colab notebook.

(sample) <https://colab.research.google.com/drive/1NAPZMqdyJbDTNx CZymO5HwLxIFPt5iOv>

(I recommend to copy this notebook for your report ☺.)

3. ケプストラム分析法を用いて、音声波形の対数パワースペクトルとスペクトル包絡を計算し、2つのグラフを1つの図に描画せよ。 Calculate a log-scaled power spectrum and spectral envelope of the waveform by using the cepstrum analysis, and draw them in one figure.

DFT length: 1024 (the same to waveform length)

x-axis, y-axis: frequency index (0..512), log-scaled power

Lifter: 0th-through-(D-1)th (D = 25)

$L[0 \leq n < D] = L[(1024 - D + 1) \leq n < 1024] = 1, L[\text{others}] = 0$

4. コードと図を含んだGoogle Colab の共有URLを提出せよ。 Submit an shareable URL of the Google Colab notebook including codes and a figure.

Submission page:https://docs.google.com/forms/d/e/1FAIpQLScRR63XELKeDtZ8jyUZ5KDRNcStlW6YxmaO3xuRo4qx69avZg/viewform?usp=sf_link

“共有 (share)” -> “共有リンクを取得 (Get shareable link)”