

Get audio with a fine label of a mosquito into MFCC form from the database.

- 1) Gather the fine labels:
  - a. Get results from the following query:
    - i. Select label.id, label.audio\_id, fine\_start\_time, fine\_end\_time from label left join mosquito on (label.mosquito\_id = mosquito.id) where label.type = 'Fine' and mosquito.sound\_type = 'mosquito';
  - b. Save the results as label.csv to inputs/label.csv
- 2) Gather the audio files:
  - a. Get results from the following query:
    - i. Select t.audio\_id, t.path from (select \* from label left join mosquito on (label.mosquito\_id = mosquito.id) left join audio on (label.audio\_id = audio.id) where label.type = 'Fine' and mosquito.sound\_type = 'mosquito') t;
  - b. Copy the files from the paths in the results from a), and rename to 'audio\_id.wav' (e.g. 4669.wav)
  - c. Save files to inputs/audio/\*
- 3) Run fine\_to\_mfcc.py with python3, after cd-ing into the project folder
  - a. Dependencies are: librosa, numpy, os, time, glob
- 4) Wait for mfcc conversion. Results are saved to output/train\_out and output/test\_out