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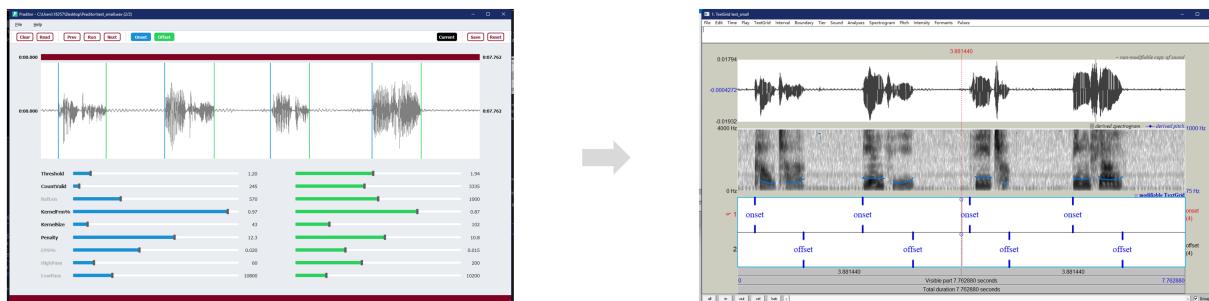
Praditor

A DBSCAN-Based Automation for Speech Onset Detection

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Features

Praditor is a **speech onset detector** that helps you find out boundaries between silence and sound **automatically**.



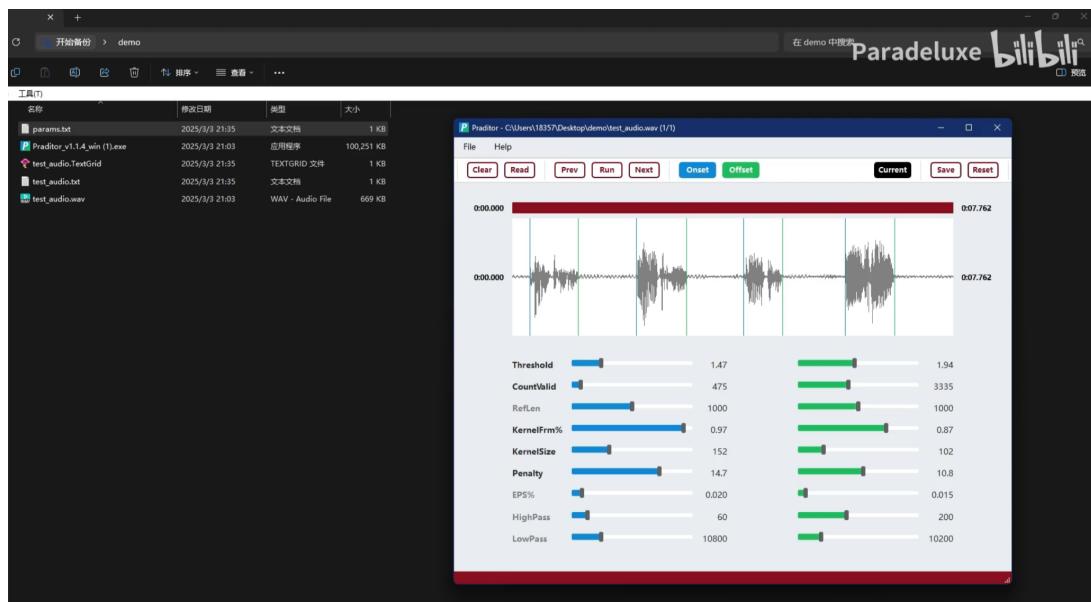
Praditor works for both **single-onset** and **multi-onset** audio files **without any language limitation**. It generates output as PointTiers in .TextGrid format.

- Onset/Offset Detection
- Silence Detection

Praditor also allows users to adjust parameters in the Dashboard to get a better performance.

You can try [test_audio.wav](#) and [mp3_test_audio.mp3](#) on **Praditor**.

Video instruction (bilibili)



Basic Operation

Although I have prepared various buttons in this GUI, you do not have to use them all.

The simplest and easiest procedure is (1) import audio files, (2) hit the **extract** button, (3) [optional] you are not happy about the results, fine-tune the parameters and hit the **extract** button again. **Until you are happy about the results, repeat step (2) and (3).**

General

File -> **Read files...** -> Import your target audio file

Extract run algorithm and extract onsets. Wait for a while until the results come out. Onsets are in blue, offsets are in green.

F5 to play the audio signal that is currently presented in the window, and Any Key to stop playing.

Next/Prev Move to the next/previous audio file

.TextGrid related

Clear If you want to temporarily clear the annotations, this does not delete/change the .TextGrid file. It's safe.

Show If you want the cleared annotations back. *Praditor* will go back to the .TextGrid and present whatever is in it.

Onset/Offset to hide/show annotations on the screen (also does not change the .TextGrid).

Parameters

Current/Default Display default parameters or parameters for the current file

Save Save the displayed parameters as Current/Default

Reset Reset the displayed parameters to the last time you saved it

 [Last](#) Go back to the last set parameters you have run

Audio signal

Mouse & Keyboard  

Wheel ↑/Wheel ↓ to zoom-in/out at **amplitude**

Ctrl/Command+Wheel ↑/Wheel ↓ to zoom-in/out at **timeline** (Ctrl/Command+I/O also works)

Shift+Wheel ↓/Wheel ↑ to move forward/backward in **timeline**

Touchpad 

↑  ↑ / ↓  ↓ to zoom-in/out at **amplitude**

←  → / →  ← to zoom-in/out at **timeline**

 **Timeline zoom** might not work in macOS. Use [Command + I/O](#) instead.

↔  /  ↔ to move forward/backward in **timeline**

Fine-tuning guidance

 Basic understanding is enough. Understanding the algorithm is better.

- **Basic knowledge:** Go to the first section of [Quick Fix](#).
- **Advanced knowledge:** Go to the second section of [Quick Fix \(Detailed Introduction\)](#).
- **Expert knowledge:** Go to [Parameter](#).

Data and Materials

If you would like to download the datasets that were used in developing Praditor, please refer to [our OSF storage](#).

Acknowledgments

Shout out to these remarkable contributors!!

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Contact us

Praditor is written and maintained by **Tony, Liu Zhengyuan** from Centre for Cognitive and Brain Sciences, University of Macau.

If you have any questions in terms of how to use *Praditor* or its algorithm details, or you want me to help you write some additional scripts like **export audio files**, **export Excel tables**, feel free to contact me at zhengyuan.liu@connect.um.edu.mo or paradeluxe3726@gmail.com.