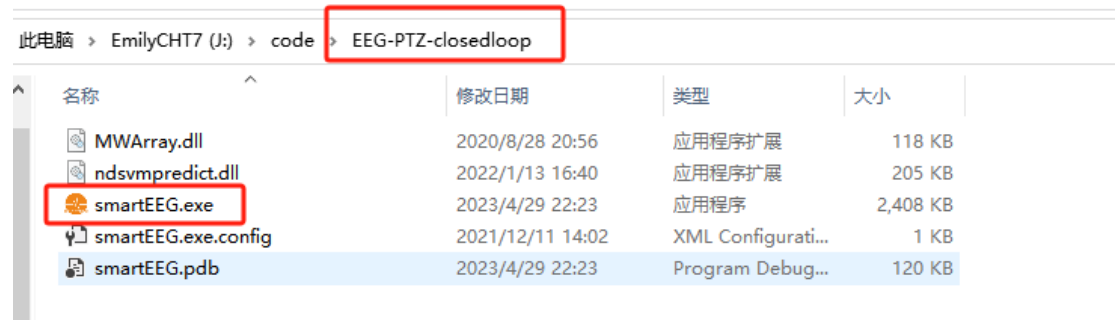


The SmartEEG Manual

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SmartEEG Overview

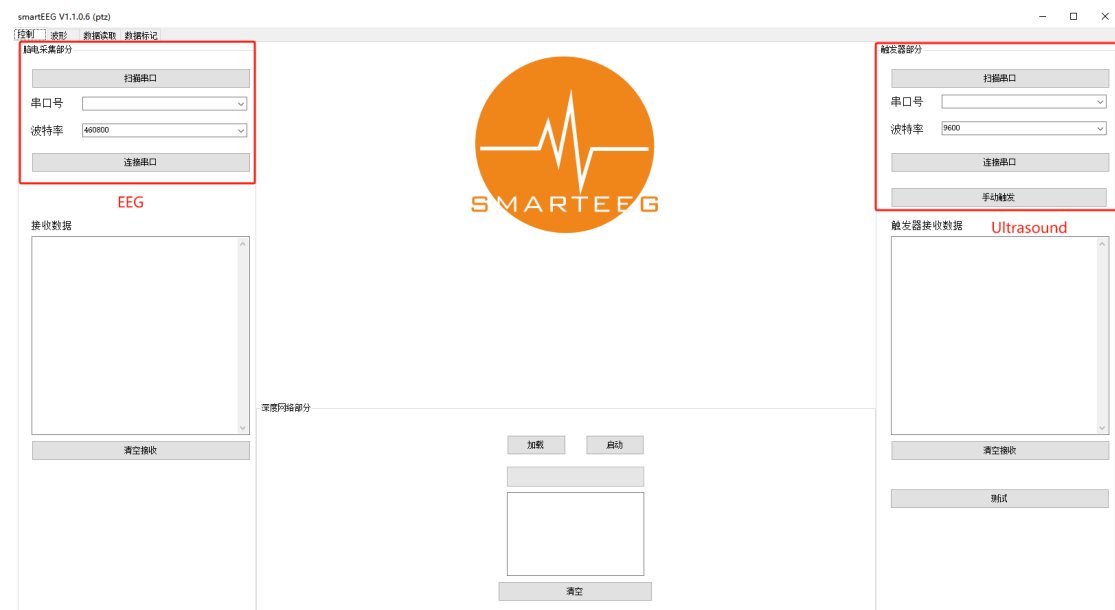
SmartEEG software contains four parts: Bluetooth serial transmission for EEG acquisition, serial transmission for ultrasound-triggered stimulation, real-time display and detection of EEG data, data review, statistics and labelling.



Chapter 1

1.1 Serial port connection

On the left is the Bluetooth serial connection for EEG acquisition, and on the right is the serial connection for ultrasound trigger stimulation.



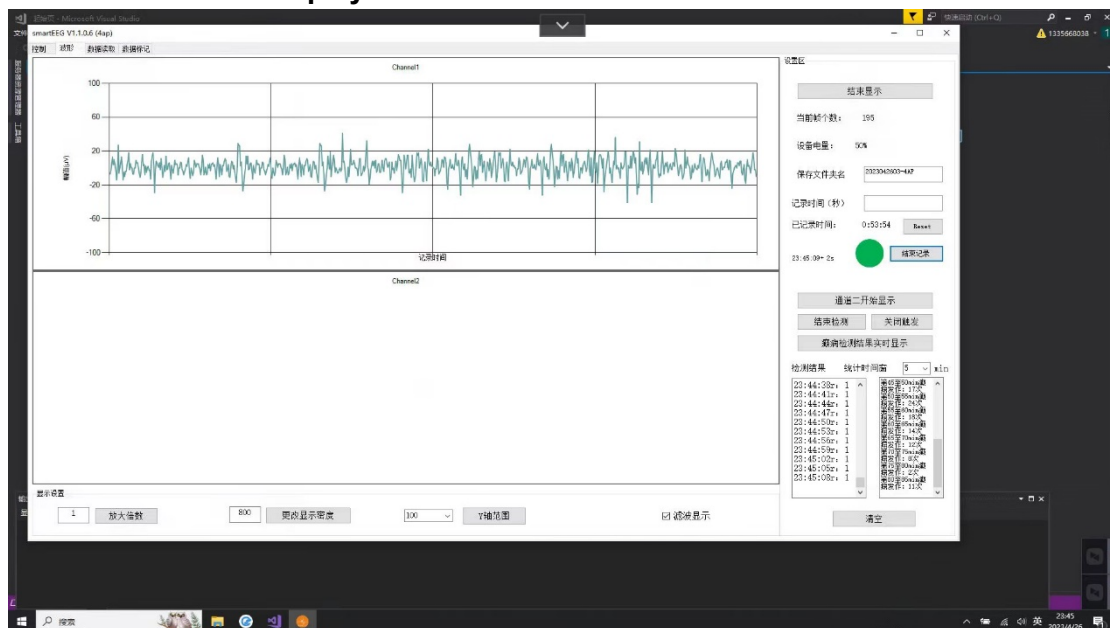
1.2 Recognition model loading

We imported the matlab trained and tested model into the software and loaded the test.



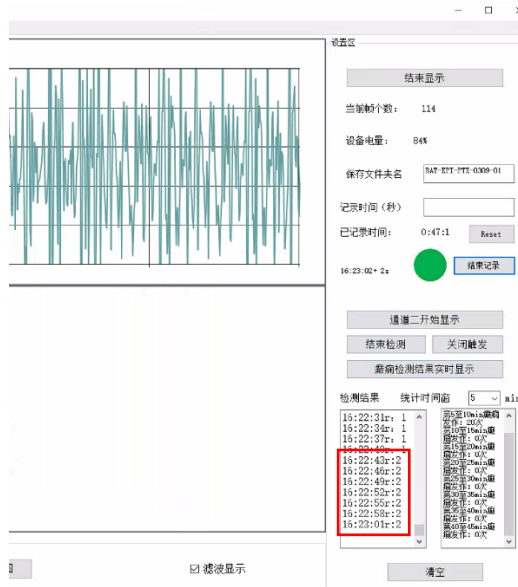
Chapter 2

2.1 Real-time data display

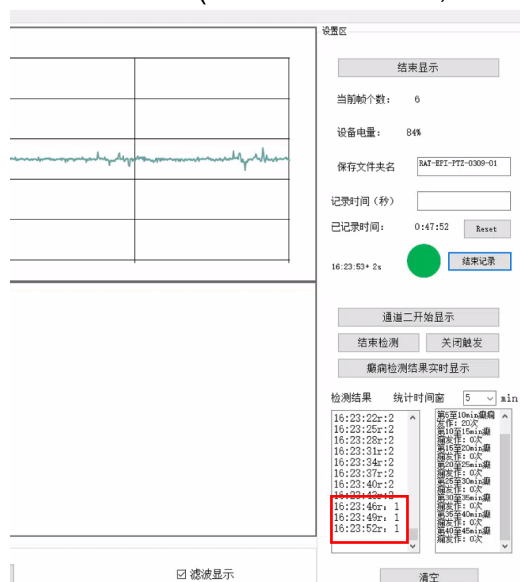


2.2 Real-time epilepsy detection

a. The figure below shows the EEG signals during a seizure, which the detection model accurately identifies and labels as 2. (1 is a non-seizure and 2 is a seizure)

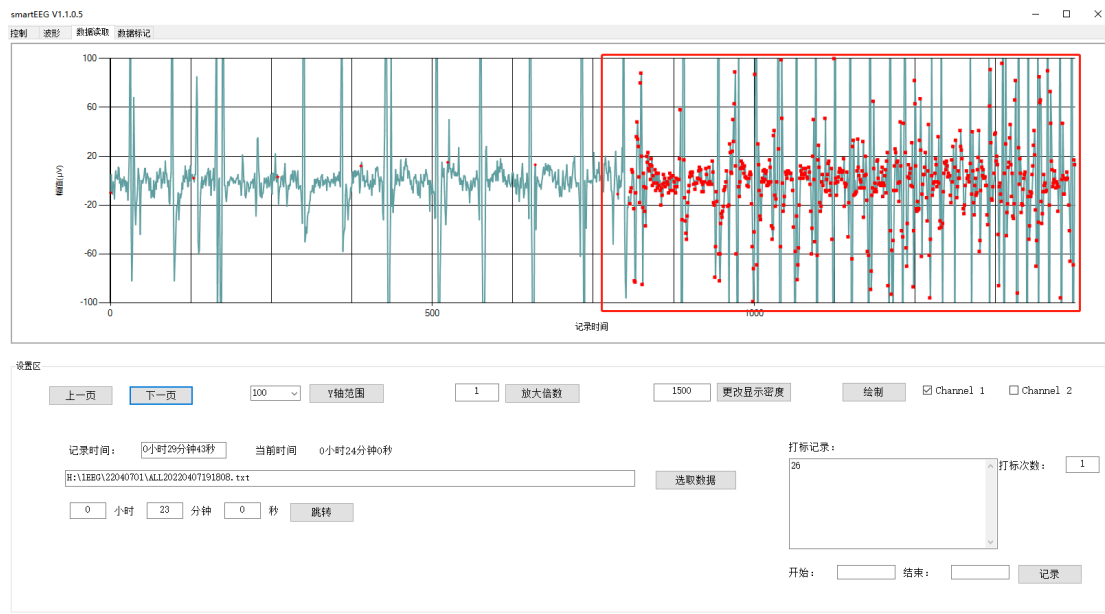


b. Below is the EEG signal during a non-seizure, which the detection model accurately identifies and labels as 1. (1 is a non-seizure, 2 is a seizure)



Chapter 3 Data review and statistics

Load data for display and statistics.



Chapter 4 Data review and tagging

Loaded data, manually labelled for model training and testing.

