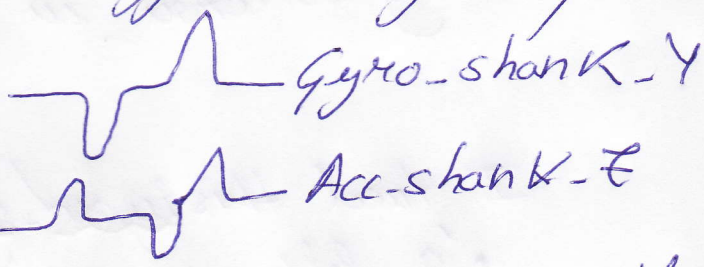
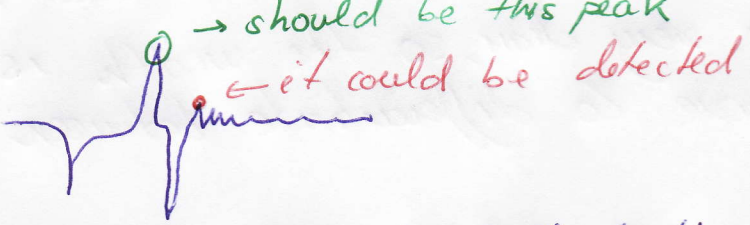
→ Peak detection in Gyroscope ⇒ in this case only use to detect the longest peak. It's no necessary use the negative peak because the signal is clearer and the pattern is different (only two peaks)

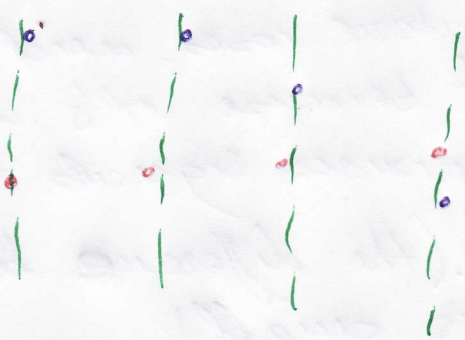


Also, there are usually several negatives peaks, so if we do gyroscope detection peak like the acceleration, some times it doesn't work fine:



But if we only detect the largest peak ⇒ ALL IS OK!!

→ Comparation between peaks detection in Acc and gyro signals.



⇒ the peak are aligned

the peak position are very very similars. Almost the same!

It's a pain to see in time the peaks position

→ Bar Plot ⇒ to see the difference between peaks detection. (With zoom to be able to see the difference because this's very small).

→ Activity detection in Gyro signal ⇒ Finally I used the points calculated in acc-signal.

I tried this input-signal:

- 'g-left-shank' for activity detection of the left and right signal. The same with 'g-right-shank' → It doesn't work because these signals are very clear, so the width is small so we have to differentiate between left and right.
- I tried differenciate between left and right detection. → the problem now is the threshold is different in the left signal between patients.
- I tried with the signal (single), abs(signal) and module in the above cases, and finally I chose module because it's more precise but with any previous signals the algorithm works properly. (the difference between using whatever option is small).