

## **ELECTROCARDIOGRAM SIGNAL PROCESSING TEST**

Electrocardiogram (ECG) signal pre-processing usually consist of several steps, being some of the most common the following:

- Recording spikes (artifacts of great amplitude) removal.
- Low-pass filtering.
- Powerline interference filtering.
- Baseline wander and offset removal.

Using Matlab, prepare a code for ECG signal pre-processing that contains all the previous steps. The code must also detect if a given channel is not connected. You can test your code using the signals provided in the `ecgConditioningExample.mat` file.

Please, document your code appropriately. The efficiency of the employed approach, and the use of adequate parameters (e.g., cut-off frequencies) will be valued.

Once completed, please make your solution available to us through a link to a GitLab repository.