Readme

Information here provided can be used to reproduce the results in the paper *Characterization of defects of pulsed thermography inspections by orthogonal polynomial decomposition*. Because of the large amount of space required by the thermal sequences, and because *github* does not support big data files, the IR sequences are available at: `https://1drv.ms/f/s!AgtrBjgDiWxVhkikDqqTeU-d76eJ`. Any version of Matlab can be used.

The following files allow reproducing the results:

1. mainSyntheticCFRP.m and data file syntheticCFRP.mat
2. mainCFRPsample.m and data file CFRPsmaple.mat
3. mainGFRPsample.m and data file GFRPsample.mat

The first m-file reproduces Figures 9-12 and Table 1; the second m-file Figures 15-18 and Table 2; the last m-file Figures 19-22 and Table 3.

Consider that the mat-files and the m-files must be in the same directory as well the *functions* folder. That directory can be anywhere in your machine, you only need to add the path when Matlab requests it (by clicking the *Add to Path* button after clicking the *Run* button). You need the signal processing toolbox in order to run the m-files without problems (`findpeaks()` and `resample()` functions from the toolbox are needed).