Exposure Fusion Patrick Renelli

Results structure

Inside the "Images/Results" folder, for each set of images processed as tests, we find a folder containing the following sub-folders:

- gaussPyramid: contains for each image passed in input, which has been loaded, the various levels of the various Gaussian pyramids, each file will be named "gaussNumberOfPhoto levelInPyramid",
- laplPyramid: contains for each image passed in input, which has been loaded, the various levels of the various Gaussian pyramids, each file will be named as "laplNumberOfPhoto levelInPyramid",
- pyramid: contains the multiplication between the pairs of the individual levels of the Gaussian and Laplanic pyramids, each file will be named as "multiNumberOfPhoto_levelInPyramids",
- overlap: contains the images that represent the final result scaled in various sizes, the largest represents the output of our algorithm, each file will be named "overlapLevel"

For some test examples there are several folders named "NameSetOfImages_numberLivelli", to show the execution with a variable number of levels, if you have only one folder it means that the execution will have been carried out with three as the number of levels, for example for Monument we have the folders "Monument 4" and "Monument 3".

Inside each folder with the name of the set of images we find the file of the final result named "Result Fusion" and the test images used inside the folder "input"

How to test the proposed algorithm

Inside the main, when the object related to the HDRElaborator class is created, an array containing the names of the images to be loaded and the number of levels to be used during the execution of the algorithm is passed to the constructor.

The image files passed as parameters must be placed in the "./Images" folder, if they are not found in this position the algorithm will not be able to load them.

Only the final result given by the execution will be saved in the path "./Images/ResultFusion".

Inside the file containing the python code, in the main, there are some arrays containing the names of various files included in the Images folder so that you can quickly try the execution of the project.