

**Two guidances should be noted before running the Matlab code for HLRP.**

**Guidance 1:** In our implementation Matlab code, the Laplacian operator used in the paper will produce slight artifacts at the boundary of the test image, thus the output image is the one after cutting off the boundary part, which is smaller than the original image. Other comparison methods are also used to enhance the relatively small image for comparison.

**Guidance 2:** In the main function, There is a key coefficient that is generally selected to be a value between 2 and 4. This coefficient should be appropriately adjusted for enhancing different images.