Code Guide

The code is for the paper: LN-MSER: SAR Image Registration using Low Noise MSER Noise (**Under submission for** IEEE Geoscience and Remote Sensing Magazine **journal)**

If you have used the code you must cite the above paper.

Code Language: MATLAB 2018b
Date of code: 2021/10/02
Producer: Dr. Mohammadreza Pourfard
Position: Adjunct professor of Amirkabir University of Technology (AUT)
Country: Iran
Email: pourfardm@gmail.com
Our database folder name: Pourfard SAR database test
Code address: https://github.com/Pourfardm/SAR-image-registration-LNMSER

How to run the code?

Our SAR database image is in the folder "Our SAR database test"
The final code is: **panorama_SAR_LN_MSER_imhisteq.m**. This code concatenates all the pictures which are put in one specified folder.
If you want to show the Figure 1 of the manuscript run the code: **diffusion_filtering.m**
If you want to show the Figure 2 of the manuscript run the code: **show_MSER_in_stages.m** and **surf_MSER.m**
If you want to compare the methods based on precision, recall, true positive, and F-measure choose the code (Table I of manuscript): **panorama_SAR_LN_MSER_compare_methods.m**

To run all the above code please change the directory of imread() To the place of database in your computer.

For example:

```
imread('C:\Users\HP\Pictures\Database Images\Our SAR database
test\test12\s2_1.tif')
```