Name – Arpit kumar singh

Mentor –D.r. R.S. Saxena sir (S.S.P.L. , Scientist , D.R.D.O)

Bad-pixel removal matlab code - writeup

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"BAD_PIXEL_REMOVAL" zip file submitted on extracting zip folder submission file is obtained containing **['main.m' , 'median_filter.m']** matlab file, a **[readme]** file and a **[data]** folder

containing images and.

"Main.m" matlab file

The "main.m" matlab file is the primary file that must be executed in accordance with the [readme] file's instructions. It reads the image whose filename is stored in the variable fig name, then saves the data as a 2D array in the variable fig and converts it to a double. The threshold and border values are respectively set in the T and B variables. The fig,rows,col, T, and B parameters are then passed to the median filter function. We ran the median function twice to achieve a superior result. The output image, represented by the variable R, is obtained and converted to uint8 before the resulting image is displayed.

"median_filter.m" matlab file

Image, the number of rows and columns, the threshold value, and the border value are required inputs. The threshold and border values can be modified based on the desired outcomes. The answer to the equation for a 3x3 sliding window will be B. The median filter algorithm is performed on the entire image, i.e., for the given sliding window at a (I,j) position, if the img(I,j) value is greater than the sliding window median, the image(I,j) value is replaced with the median. Image obtained is returned.