

Implementation of image processing techniques using OpenMP and MPI

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Ordering:

The report is present in the root directory

In the Code directory, you can find 2 folders Operation on Image and Operation on Arrays

To run the content in Operation on Image you need OpenMP and OpenCV

OpenCV is used to read the image and convert it into the desired format for processing.

The Operation on Image contains 4 files one is the lvp.h header file which contains the declaration of all the functions and lvp.cpp contains the implementation of those in serial and lvpomp contains implementation in parallel and first.cpp is the main file

To compile you can use the following command

```
g++ -fopenmp first.cpp lvp.cpp `pkg-config --cflags --libs opencv4`
```

And then run the code using ./a.out

Operation on array contains the implementation of the codes for the array using mpi, openmp and also in sequential format. It contains contrast and brightness for 2d array in serial and parallel and Convolution for 2d array in serial and parallel