

CIIC 4030/ICOM 3046 Programming Languages

Assignment #4

The **median filter** is a nonlinear digital filtering technique, often used to remove noise from an image or signal. In this project you have to implement a simulation (not a real implementation) of a client-server application to process images using Scala concurrency collections.

1. A client gets/reads an arbitrary image submitted by an user.
2. The client submits the image to two servers.
3. One server processes the image with a serial implementation of the median filter (your own implementation).
4. The second server processes the image using Scala parallel collections
5. Both servers compute the corresponding execution time and submit it to the client with the processed image.
6. The client receives a report of execution times and output images.

Submit

1. All the source and header files needed to compile, run and test your code
2. A short report discussing your implementations and the outcomes of the performance evaluation.