Project Parallel and Distributed Programming

Team members: Karoly Gergely Bela && Oscar Gal

Common requirements

Each student or team of 2 students will take one project. It is ok to take a theme that is not listed below (but check with the lab advisor before starting).

Each project will have 2 implementations: one with "regular" threads or tasks/futures, and one distributed (possibly, but not required, using MPI).

The documentation will describe:

- the algorithms,
- the synchronization used in the parallelized variants,
- the performance measurements

Theme:

Applying a simple filter on an image (e.g., a convolution/linear filter).

We've chosen to add a grayscale filter on an image and we highlighted individually the colours red, green and blue in the imput image

Tasks:

For each implementation described in the requirements, we created a task

The documentation for each task can be found in the folder containing the code for the specific task.