

ECE 493/693  
Fall 2004  
Assignment 1

Task: Write a parallel image smoothing program

Due: Friday, September 10, 2005

Details:

Write a C/MPI program that opens a file containing a RAW grayscale image, smooths it with a mean filter, and writes it to a new file. The program should work with an arbitrary number of processors and on images of any size that will fit in memory. Image sizes and file names should be passed on the command line. Image data should be partitioned row-wise.

Turn in:

Printout of program code  
Printout of original image  
Printout of smoothed image