Creative Computing 2 (IS52020A) Assignment 1 : 2010-11

Colour and Images

A. Your task for this part of the coursework is to implement reducing the size of an image by a linear factor of eight (*i.e.* from 3072×2304 pixels to 384×288) in two different ways:

- considering 8×8 square blocks of pixels, and preserving only the upper-left pixel from each block;

- considering 8×8 square blocks of pixels, and averaging the sixty four pixels' colour values.

Run your reducing sketches on the image (taken by C. Rhodes at King's Cross St Pancras, on 23rd November 2010) accompanying this coursework. (You may also want to test your sketches on other images to make sure that they function as specified above.)

As your submission to this part, include: your *Processing* sketch code; the reduced images resulting from running your sketch on the accompanying source image; and a short (less than one A4 page) report including a description of how your code works, an explanation of any choices you made, and any observations you have regarding the output images. [40%]

B. Design and create an interactive *Processing* sketch illustrating one or more aspects of visual perception. Your sketch may use images from the Commons as source materials provided any licencing terms are adhered to, or may be designed from scratch.

As your submission to this part, include your *Processing* sketch code, any source materials along with origin and attribution, and a short (less than one A4 page) description of the aspects of visual perception your sketch is intended to illustrate, and how it does so. [60%]

The deadline for this coursework is **Friday 28th January 2011**. Sketches must be submitted electronically using the folder named '`1`' in the '`IS5020A-assignments-2010-11`' directory in your homespace on `igor` (or the `G:` drive); written components may be submitted electronically (in plain text or Portable Document Format **only**) or as hardcopy. Your submissions will be assessed for how successfully they fulfil their briefs, the technical content of the programs, the clarity of your written descriptions, and any added value.