Topics in Theory & Programming of DIGITAL IMAGES Summer 2010



Frieder Nake

Note 08 | 21 June 2010

Assignment 2

Please, hand in your solution to these questions as a pdf file by Monday, 28 June 2010!

Exercise 2

What is the task of rasterization?

Say what a raster is. Say why in computer graphics lines and areas must appear in rasterized form. Give an idea of how a straight line segment will generate its corresponding raster-counterpart.

Do you know what a "scanline algorithm" is, or what it does? Tell!

Exercise 3

What are differences between an image file stored as tif or as jpeg?

How many bytes does an image of 1024 x 1024 pixels require if each pixel's color is coded as the typical (R, G, B, A) value?

Exercise 4

Explain briefly how a colored image is coded in the RGB-system and in the HSV-system. What are some advantages and disadvantages in each of the two systems?

Is it possible to convert from one of these to the other?

M.A. & M.Sc. in Digital Media or Informatik, Diplom Informatik Monday 16 to 18 in OAS 3000 (Linzer Str. 9a) | VAK 03-05-H-708.53 2 SWS | 6 CP ECTS | Modul M-110