Document Image Analysis

Assignment 3

Deadline: Tuesday, March 19, 2024 (end of day)

Objective

In this exercise, you will perform several binarization algorithms on a RGB image of a document and compare the different method.

Task: Binarization

- (a) Conceive an algorithm to perform a binarization based on a simple non adaptative thresholding.
- (b) Based on a global thresholding, conceive an other binarization algorithm.
- (c) Design an algorithm to perform binarisation based on local adaptative thresholding.
- (d) Apply your algorithms on an RGB image of a document. Examples are provided in ILIAS.
- (e) Optional: conceive and apply a fourth binarization algorithm of your choice.
- (f) Submit on ILIAS:
 - Your code (one file should be enough).
 - At least four images: the original image, one binary image for each method.
 - A file text with your name, surname and a brief description of your algorithms.