Groot

Project Id - 18

Project Title - **Blob Detection(used to find the name of the book and writer)**

Github link - https://github.com/Naagar/Groot

Team Members - Sandeep Kr. Nagar 2018701015

Input: images acquired by scanning book covers

Main Goal -Finding the Blob in an image using **Lindeberg's watershed-based grey-level blob detection algorithm.**

Steps:

Step-1: Preprocessing(To set the threshold so that we can find the text
 - reading the image.
 - converting a color image to grayscale image.
 - Sharpening of the grey level image (high boost filtering)
 ---first blurring with Gaussian filter, unsharp mask and
 - Finding the threshold using the Histogram analysis.
 - Setting the threshold
Step-2: Lindeberg's watershed-based grey-level blob detection algorithm.

Text Information extraction(from the output)

Step-4: Detection
 - the existence or nonexistence of text in the image must be determined

Step-5: Localization(Binarization techniques)
- text localization methods can be categorized into two types: region-based and texture-based
- Zhong CC-based method.

Step-6: Tracking

Step-7:Extrection & enhacement Recognition.

First, we will try to find out the background and the Text region Grayscale intensity with the help of the histogram analysis.

After finding the threshold for the text in a grayscale image from the histogram, we will use the "Blob Detection" method to find out the text region.

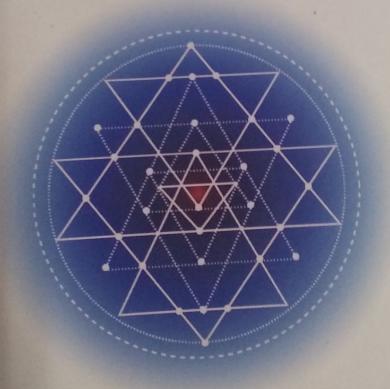Then we will use some text information extraction methods

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