

Groot (report)

Project Id - 18

Project Title -Groot

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

Team Members - Sandeep Kr. Nagar, 2018701015.

Input: Images of book covers

Main Goal -Extracting the Book and Writer's name from the cover image of the book(English)

Milestones Achieved-:

- Step-1: Pre-processing(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: Edge detection.

Step-3: Enhancement of Edges of text in the resultant image of step-2.

Step-4: Binarization and Morphological operations.

Milestones Achieved-:

Step-5: Detection

- the existence or nonexistence of text in the image must be determined

Step-6: Localization(Binarization techniques)

- text localization methods can be categorized into two types: region-based and texture-based
- Zhong CC-based method.

Step-7: Tracking

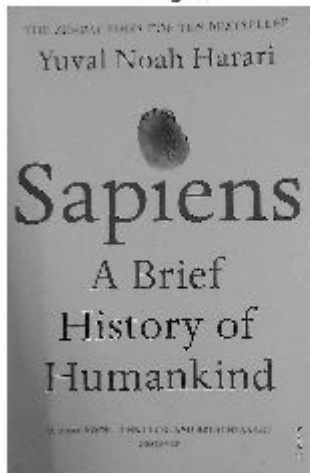
Step-8: Extraction & Enhancement Recognition.

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

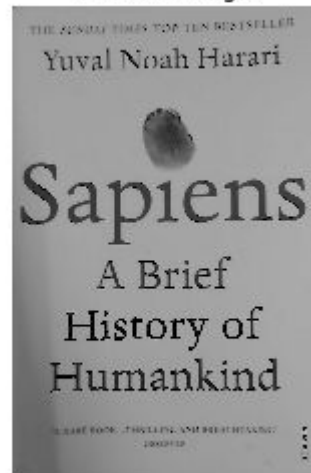
After finding the threshold for the text in a grayscale image from the histogram, we will use the “Blob Detection” method to find out the text region.

Then we will use some text information extraction methods

Image



filtered image



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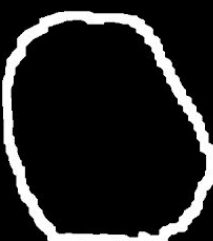
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**History of
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THE HISTORY OF HUMANITY

BOOK ONE

1

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