Book Cover Recognition

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Extract Book Title and other details from book covers
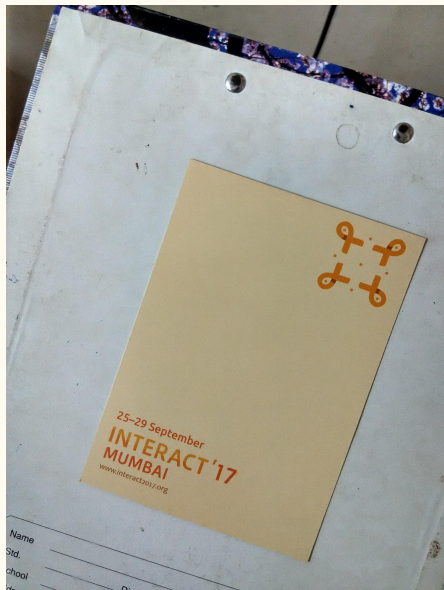
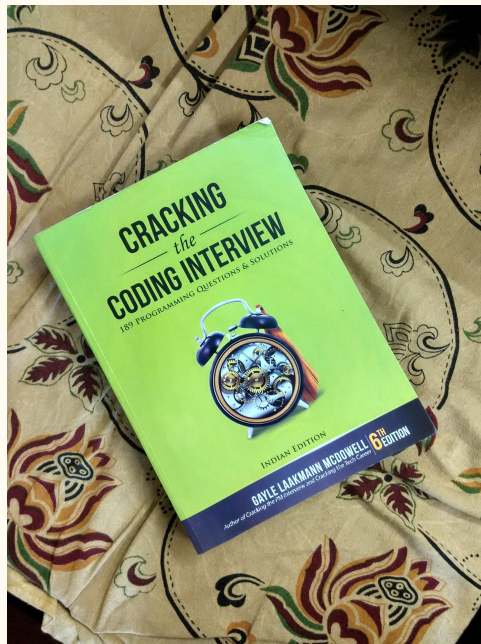# METHODOLOGIES

Processing Pipeline and steps involved

- Orientation Correction

- Detect Useful regions

- Filtering using Boundary Boxes

- Merge Boundary Boxes
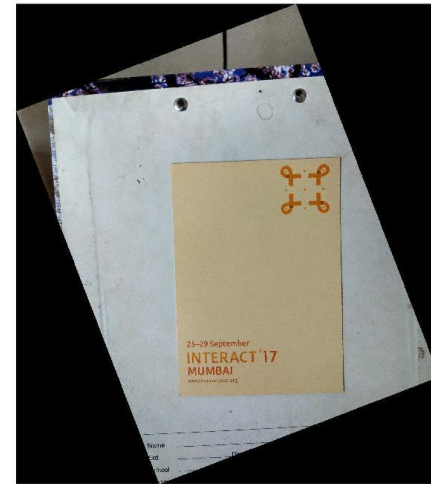
- Optical Character Recognition
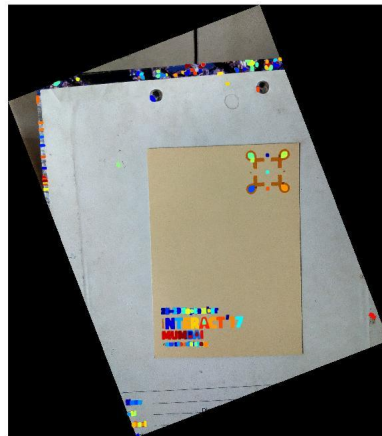
Input Images

Img1

Img2

Orientation Correction

1. Edge Detection

2. Hough Transform

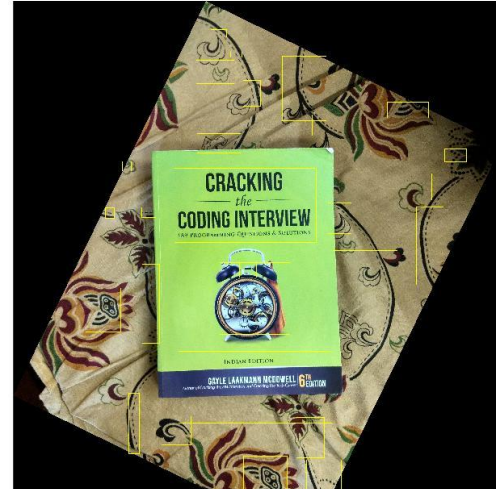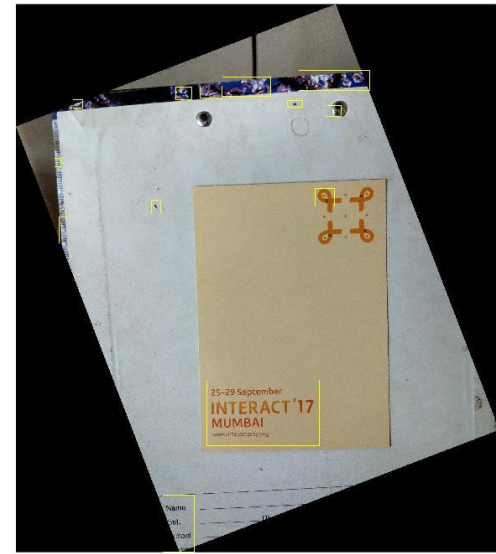3. Perform Rotation

Detecting Useful Regions

- MSER

- Filter using Geometrical Properties

  - Aspect ratio

  - Eccentricity

  - Euler number

  - Extent and Solidity

- Stroke Width

Boundary Boxes

- Boundary Boxes for each region

- Filter according to overlap status

- Remove isolated regions

Results after Applying OCR

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Command Window

New to MATLAB? See resources for Getting Started.

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    >>

    >>

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    >>

    >> coverrec
    25--29 September
    INTERACT7
    MUMBAI
fx  www.interact2o17.org >>
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>> coverrec
NDIAN EDITION
Author of Cracking e PM Intewiew and Cracking the Tech Career
em: LAAKMANN ucnuwELL
CRACKING
t/e ---
CODING |NTER\l|EW
189 PROGRAMMING O sssssssssssssss NS
. .
>>
```

Further Improvements

- **Region Filtering**
- **OCR**
- **Typo Correction**

References

1.Chen, H., Tsai, S. S., Schroth, G., Chen, D. M., Grzeszczuk, R., & Girod, B. (2011, September). Robust text detection in natural images with edge-enhanced maximally stable extremal regions. In 2011 18th IEEE International Conference on Image Processing (pp. 2609-2612). IEEE.

2.MATLAB Answers. https://in.mathworks.com/matlabcentral/answers/index

Thanks!