

Segmentation Algos

IID - (a) - thresholding, (k means)
pixels

↳ detection problem.

need border tracing after that.

uses correl - (b) edge filtering : contour estimation

uses (c) Hough transform : detection problem
but detects contours from a
quantized set of possible
contours.

USE - (d) Region split/merge :
detection but uses correlⁿ
b/w neighb. pixels.

(e) Energy minimiz, edge. contour
estimation. (f) Energy min
region based

IID

Non IID
(a) Region based
(Energy min)

(b) Edge based
Energy min.

(Split/merge)

Edge filter

Contour of the
region

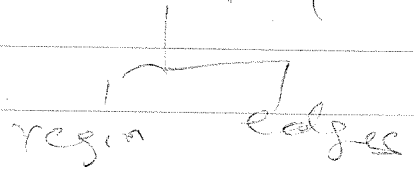
Hough Transform

(Thresh / Kmeans)

Thresh
K means

(c) Shape prior info

Energy minimize, with shape prior
length term.



Next time

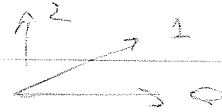
- Energy min - Region
- Shape prior energy term.
- (Level set method)

Border tracing -

- first black pixel

At iterⁿ \mathcal{M}

dir



$$dir^{new} = (dir^{old} + 7) \bmod 8 \quad dir^{old} \text{ even}$$

$$(dir^{old} - 6) \bmod 8 \quad \text{odd}$$

