

Convexity Grouping of Salient Contours

By

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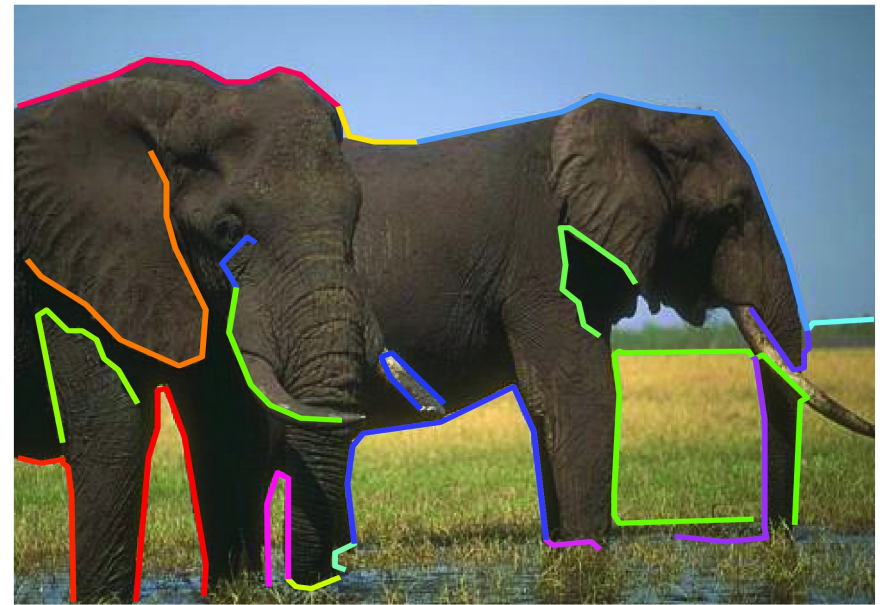
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Grouping of edges into contours

- Grouping of edges into contours is a difficult task (occlusion, shadows and low reflectance contrast).



Convexity represents an important principle in grouping

- The parts of an objects contour with high convexity correspond to object parts.



- Borra and Sarkar (1997) found that grouping subject to a convex constraint gave best performance.

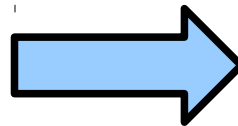
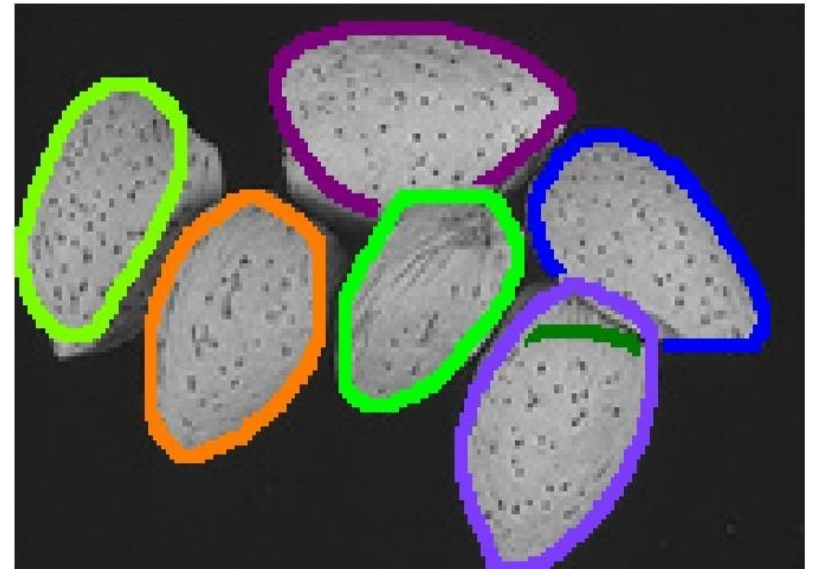
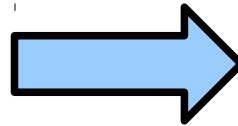
- When grouping it is important to extract:
 - Contours of high convexity but not strictly convex.
 - Open convex contours (robust to occlusion).



Existing techniques do not exhibit these properties.

The techniques of Jacobs (1996) and Wong et al (2007) are designed to extract strictly convex closed contours.

Wong et. al, IJCV (2007)



Results of proposed method

