

Edge-based Segmentation

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Motivation: Edge-based Segmentation

- ▶ Used to prepare images for analysis
- ▶ Possible use to detect objects in images
- ▶ Image manipulation

Explanation

- ▶ Transform image to grayscale
- ▶ Filter the data with a low/high/median pixel window.
- ▶ Round image to black and white by choosing a threshold
- ▶ Colour only pixels with dissimilar neighbours black

Applications

- ▶ Object detection
- ▶ Image enhancement
- ▶ Image analysis

Conclusion

- ▶ Outsourcing of repeatedly performed computations allows for large speedup
- ▶ Edge-based Segmentation is well suited for the DataFlow paradigm