

Yuli Wu

Contour Refinement of Leukocyte Segmentations in Scans of Stained Bone Marrow



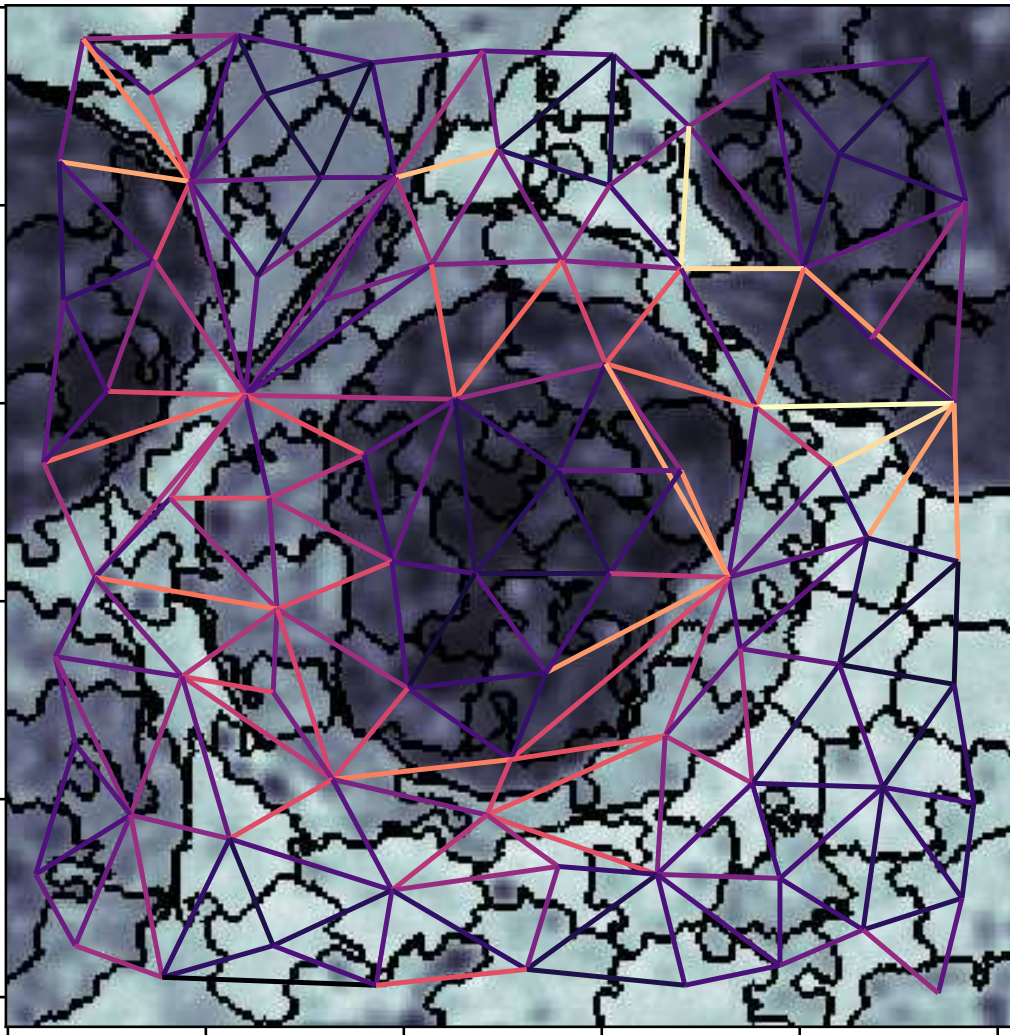
Lehrstuhl für
Bildverarbeitung

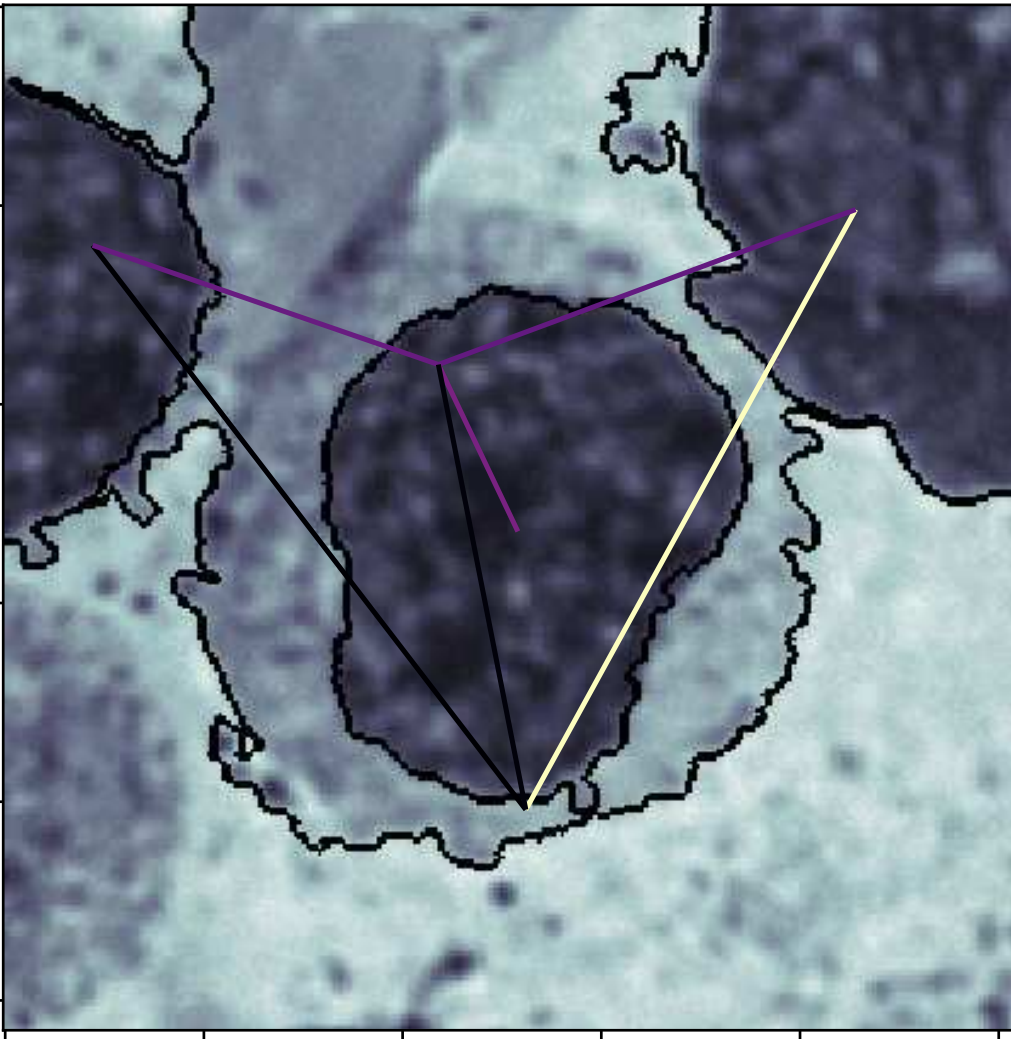
RWTH AACHEN
UNIVERSITY

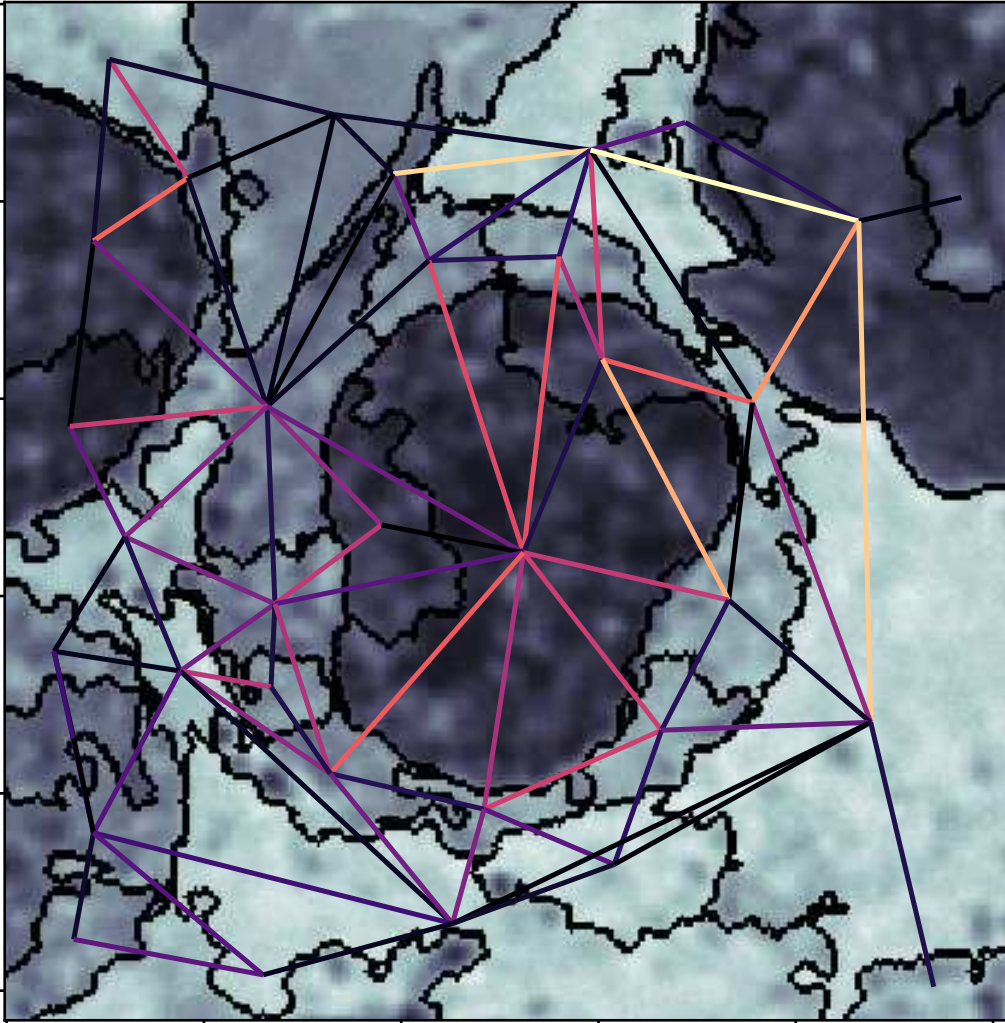
RAG

Region Adjacency Graphs









- Similar adjacent superpixels are merged

• **Not effective**

Methodology

Nonnaisation





Processing

segmentation





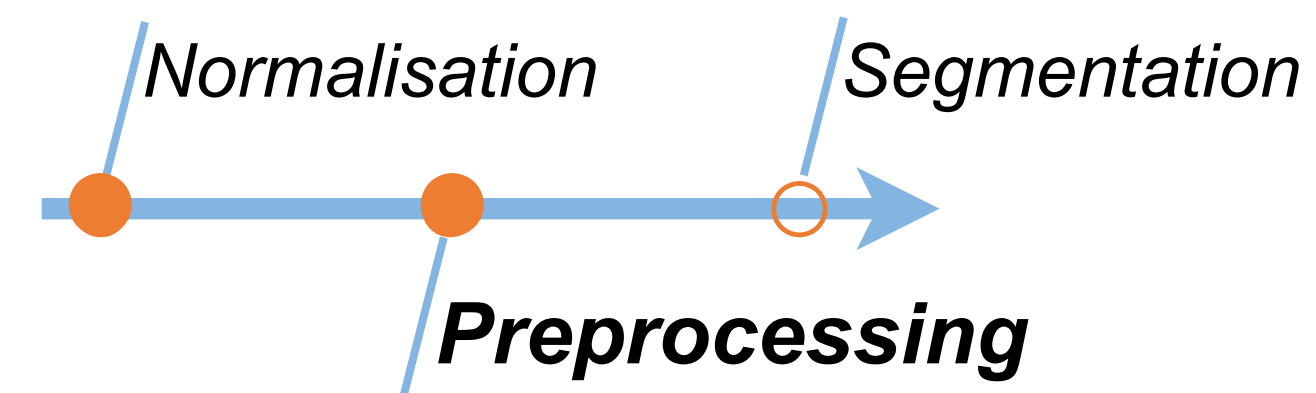




Threshold = 0.04

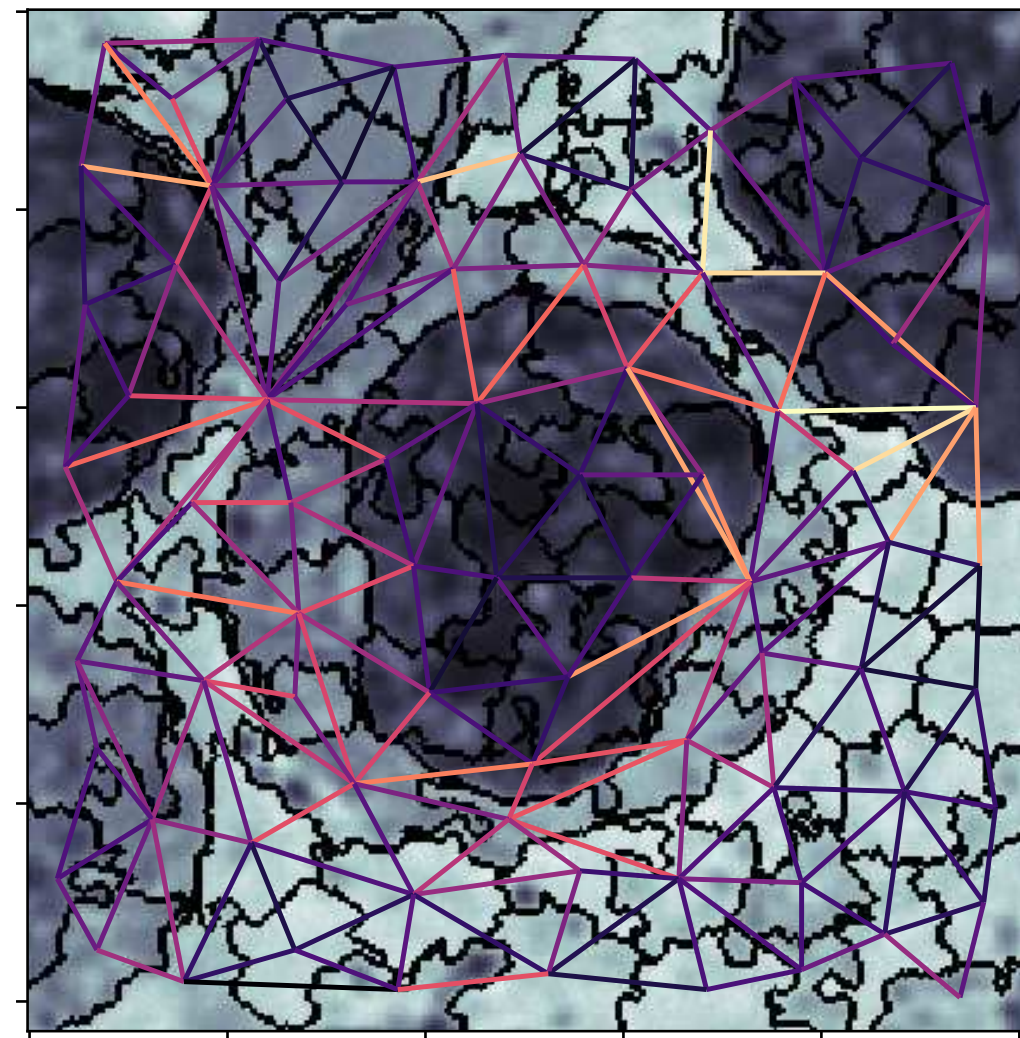
Thresholder=0.06

Original

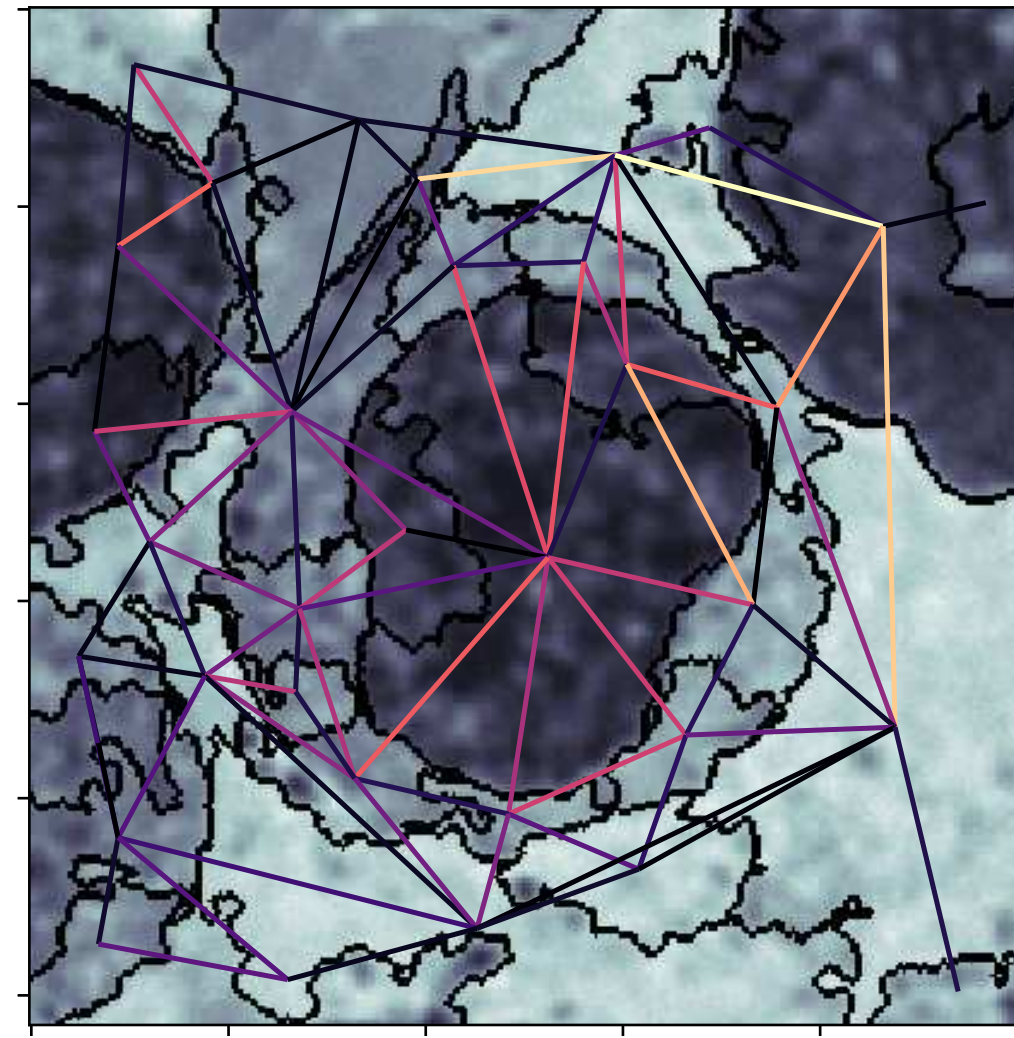


Region Adjacency Graphs

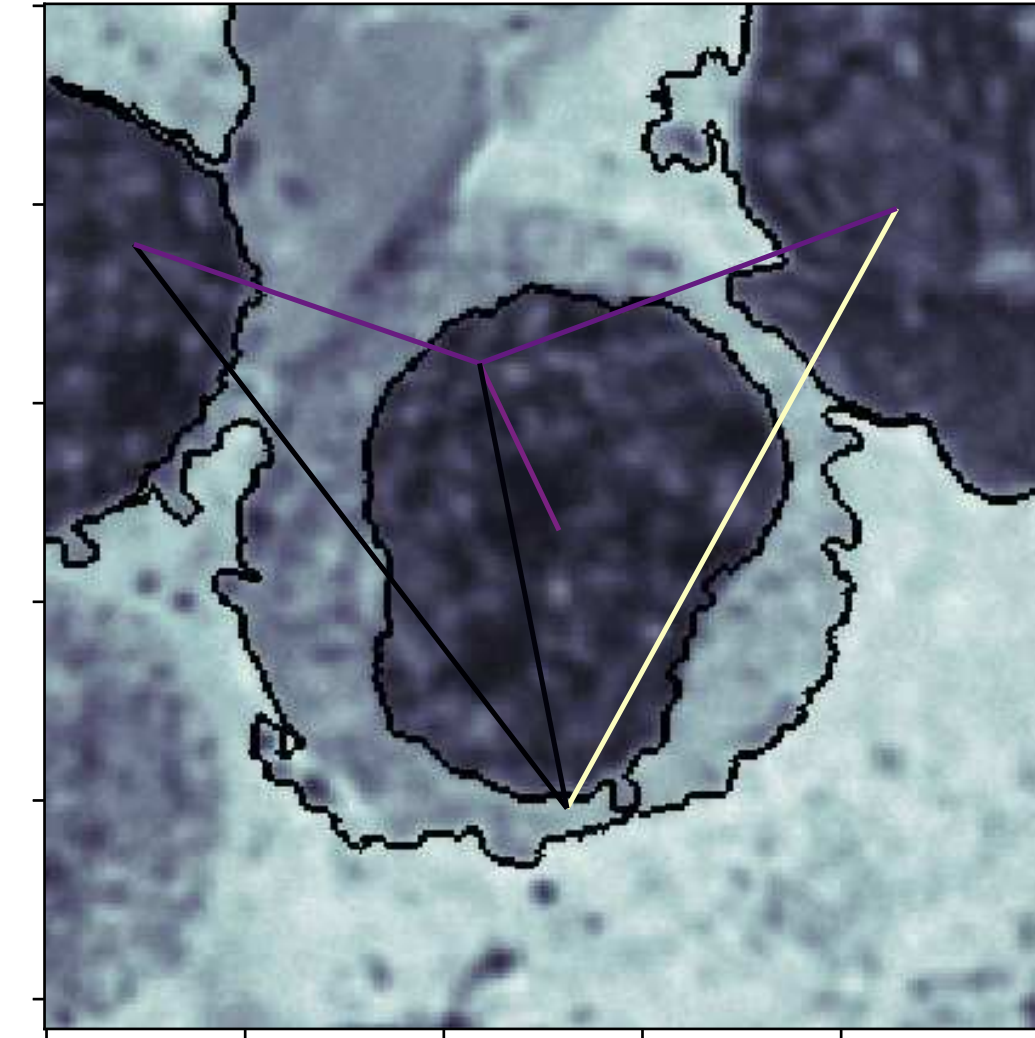
- Similar adjacent superpixels are merged
- Not effective



Original

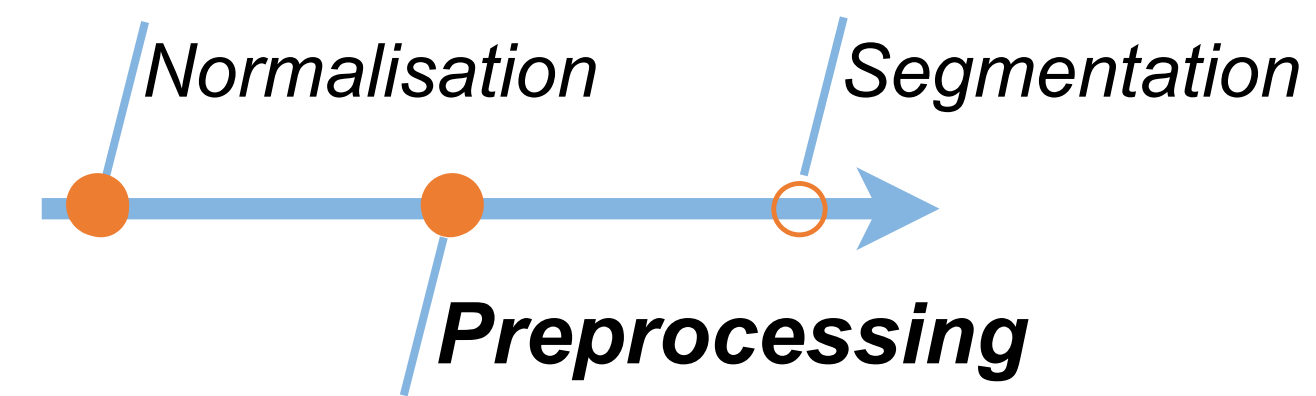


Threshold = 0.04



Threshold = 0.06

L0 Gradient Minimisation



Methodology

- Given I to find S
- Counting function non-zero gradients: $C(S)$
- Constraint:

$$\min \left\{ \sum (S - I)^2 + \lambda \cdot C(S) \right\}$$