Yuli Wu

Contour Refinement of Leukocyte Segmentations in Scans of Stained Bone Marrow

Lehrstuhl für
Bildverarbeitung

RWTH AACHEN
UNIVERSITY

L0 Gradient Minimisation

Gradients in Polar Coordinates

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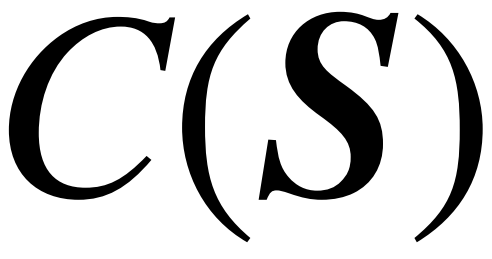
$$\min\left\{ \sum (\boldsymbol{S}-\boldsymbol{I})^2 + \lambda \cdot C(\boldsymbol{S}) \right\}$$

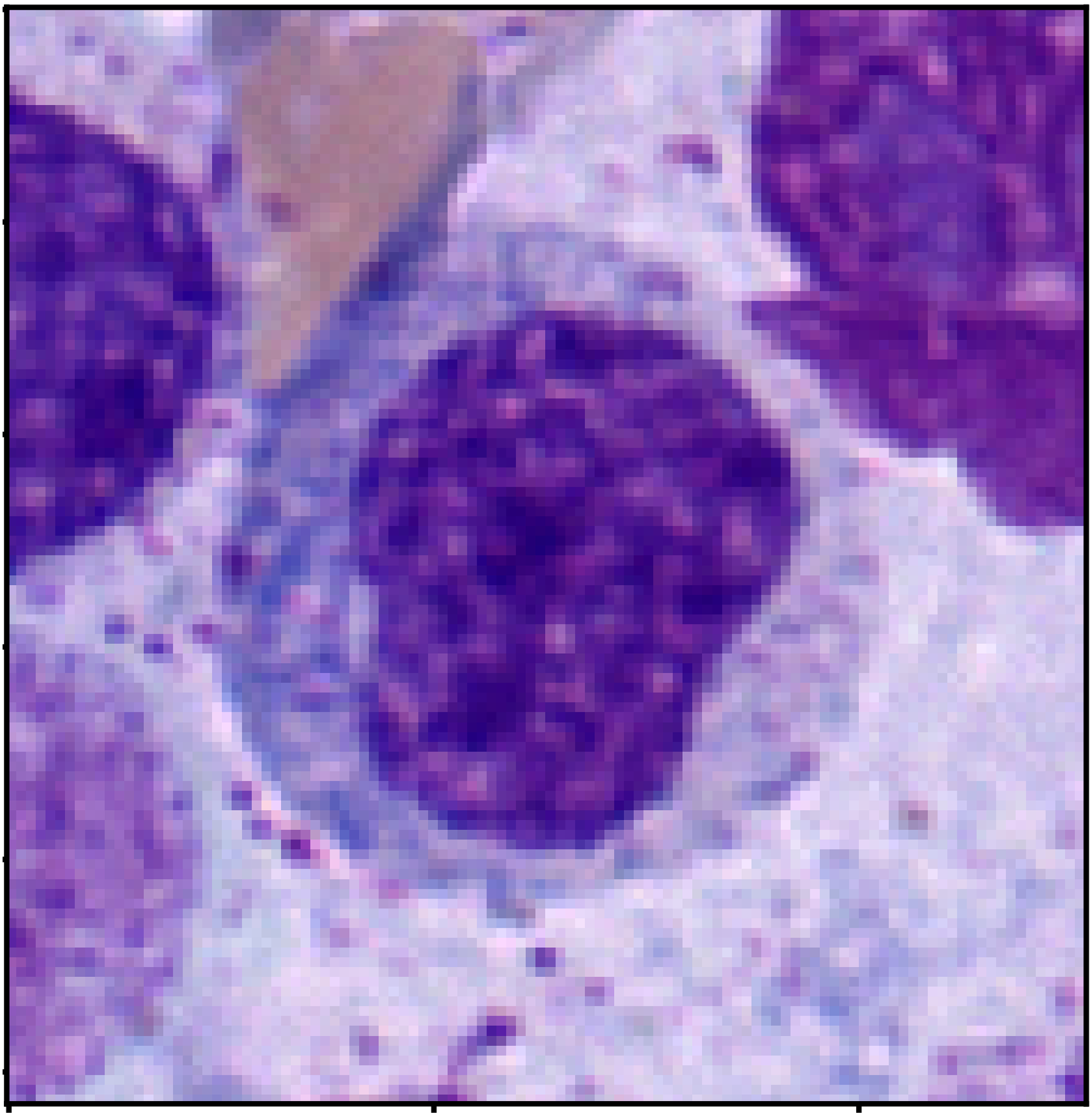
- Given I to find S


C(S)

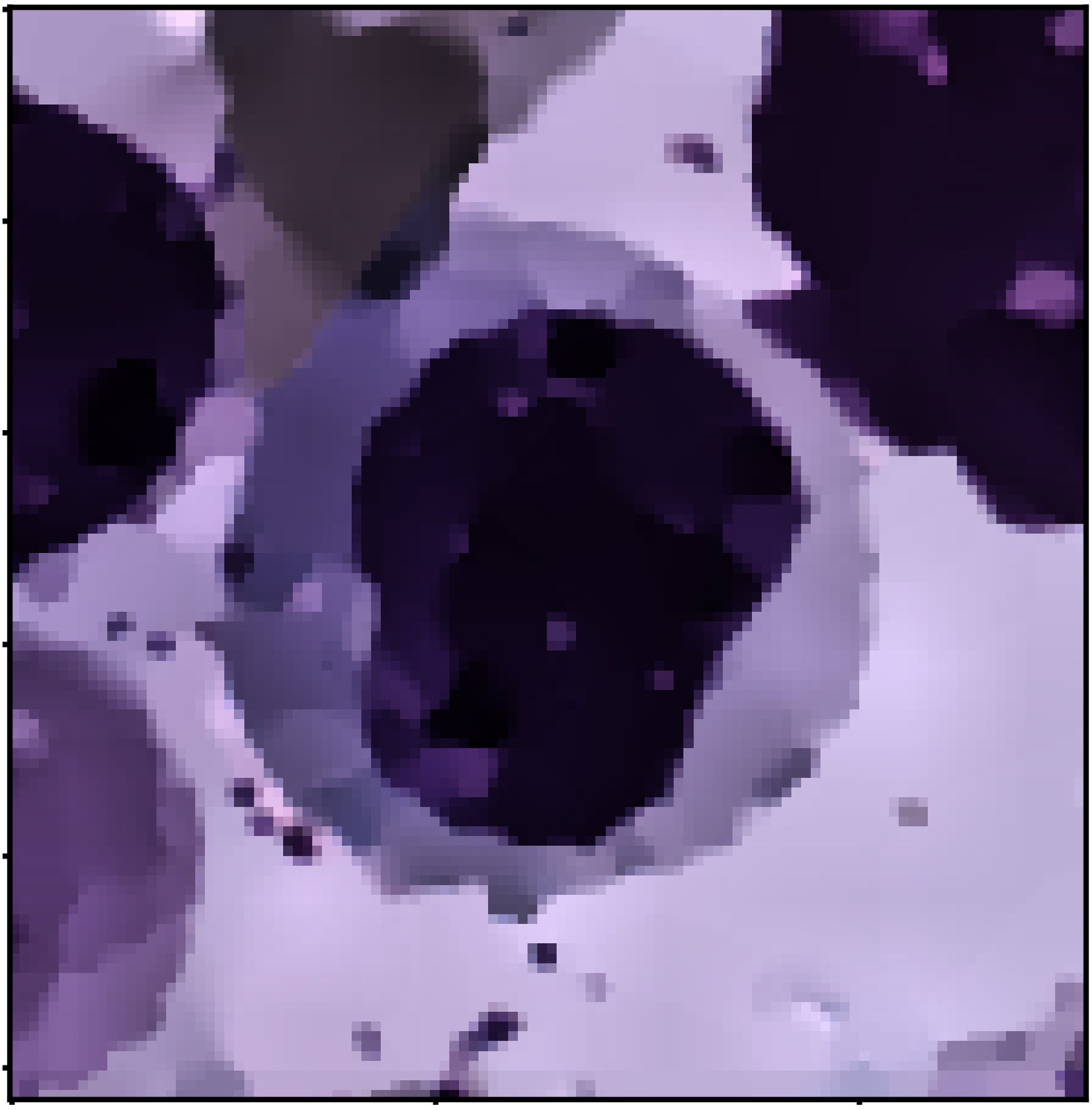
- Counting function non-zero gradients:

- Constraint:

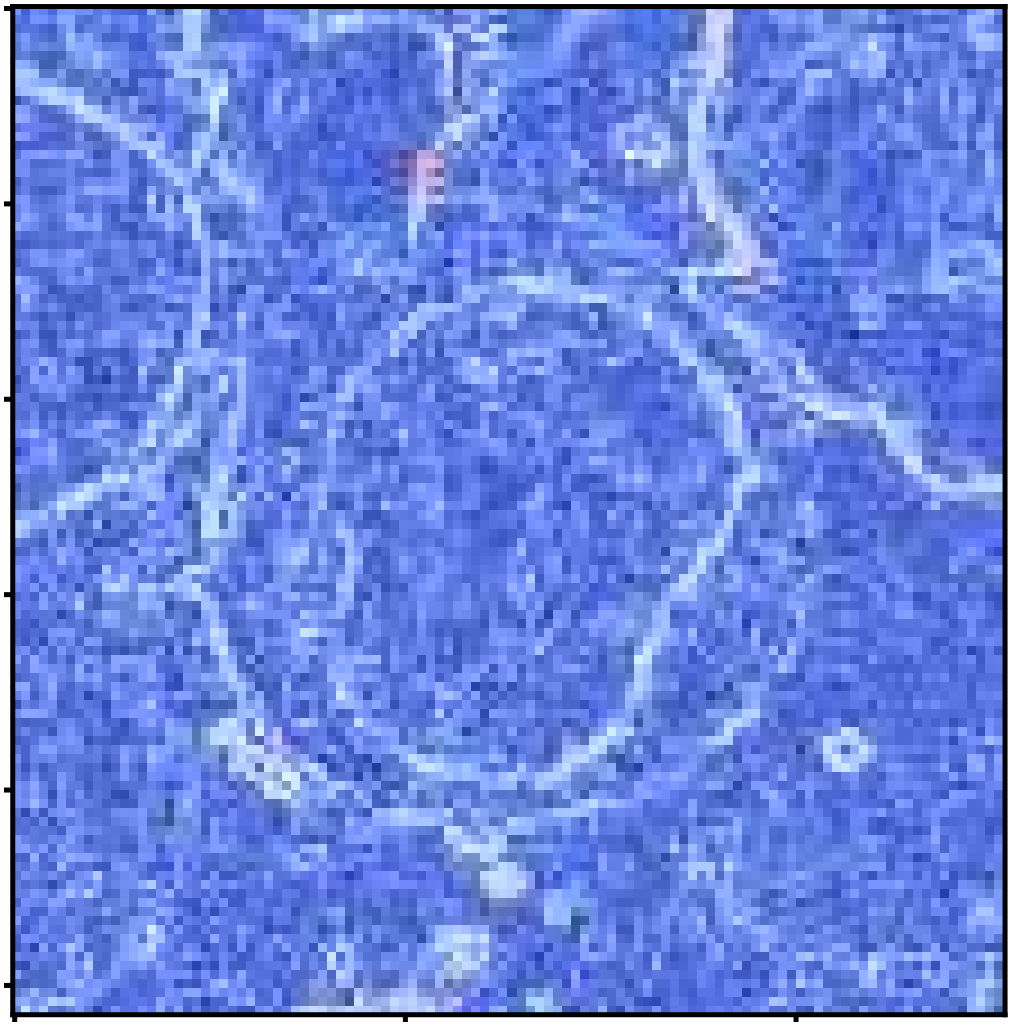
Original Image



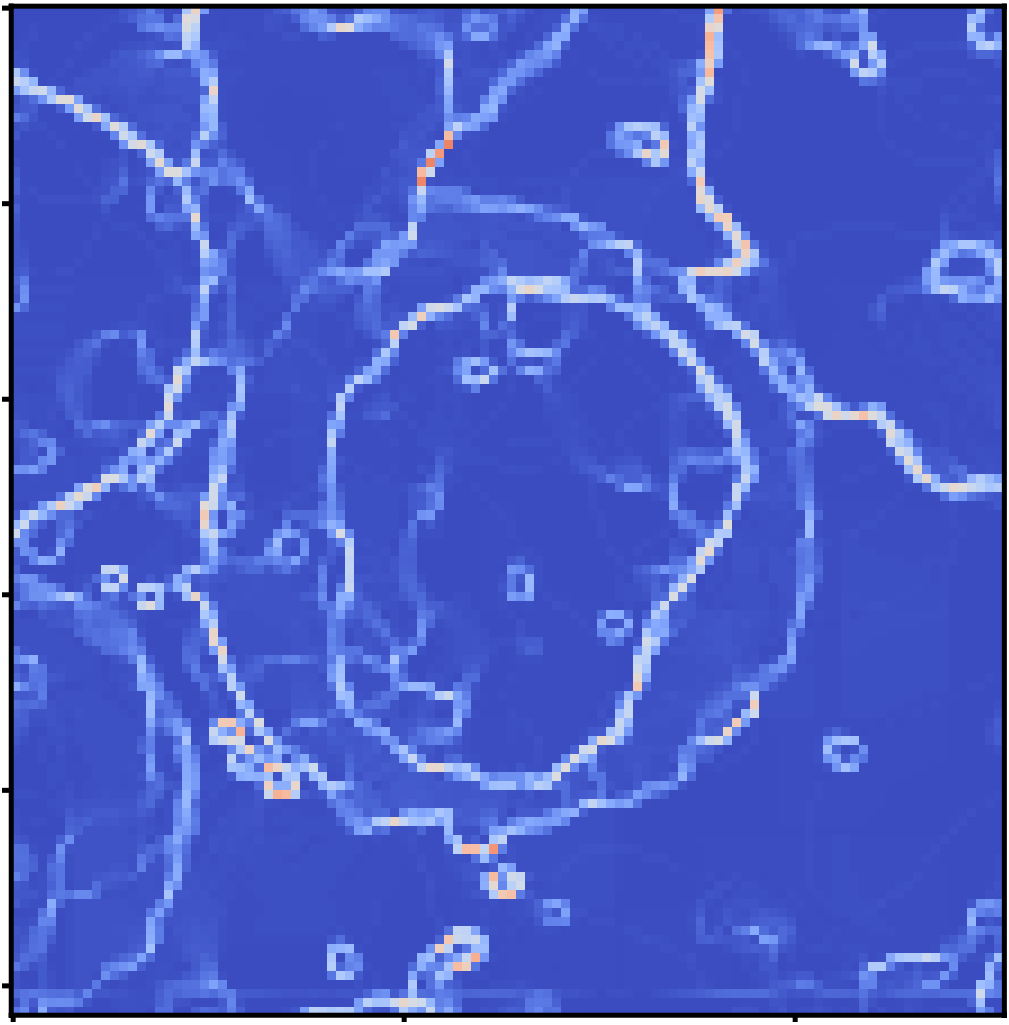
CLAHE of L0



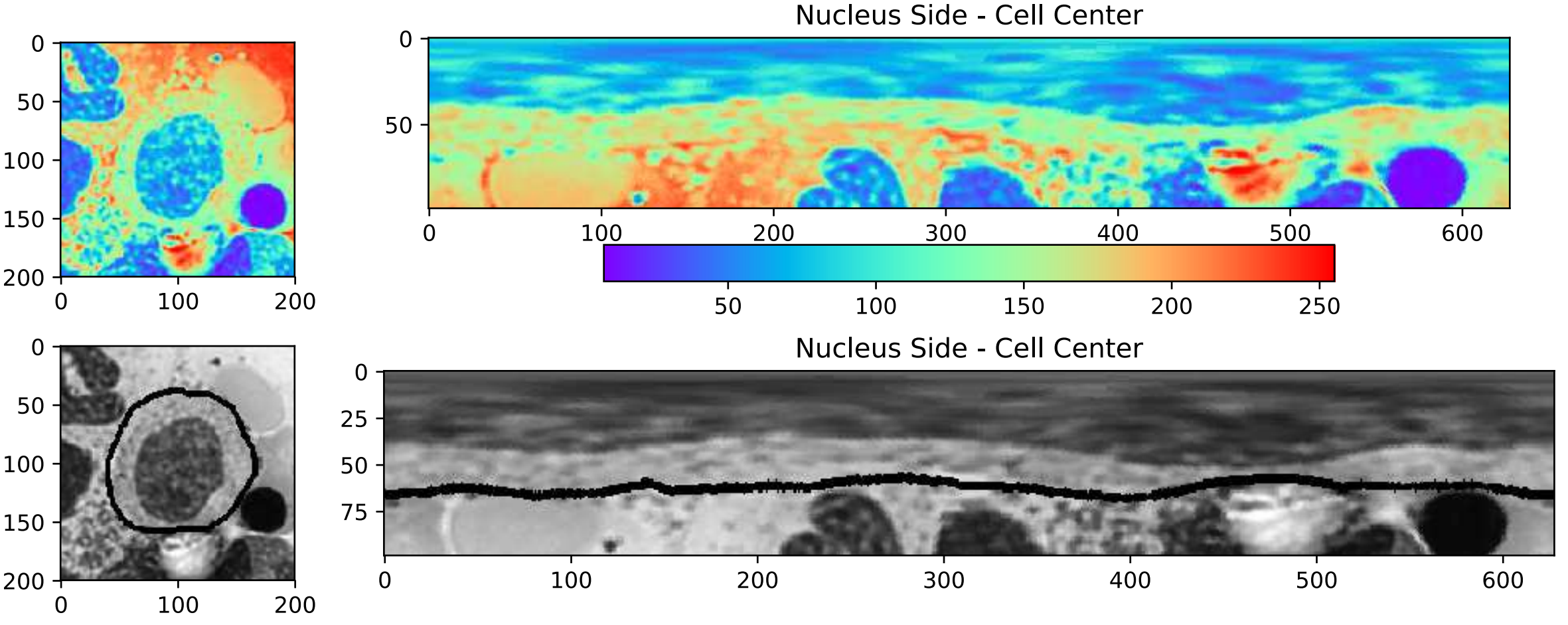
Gradient (Original)

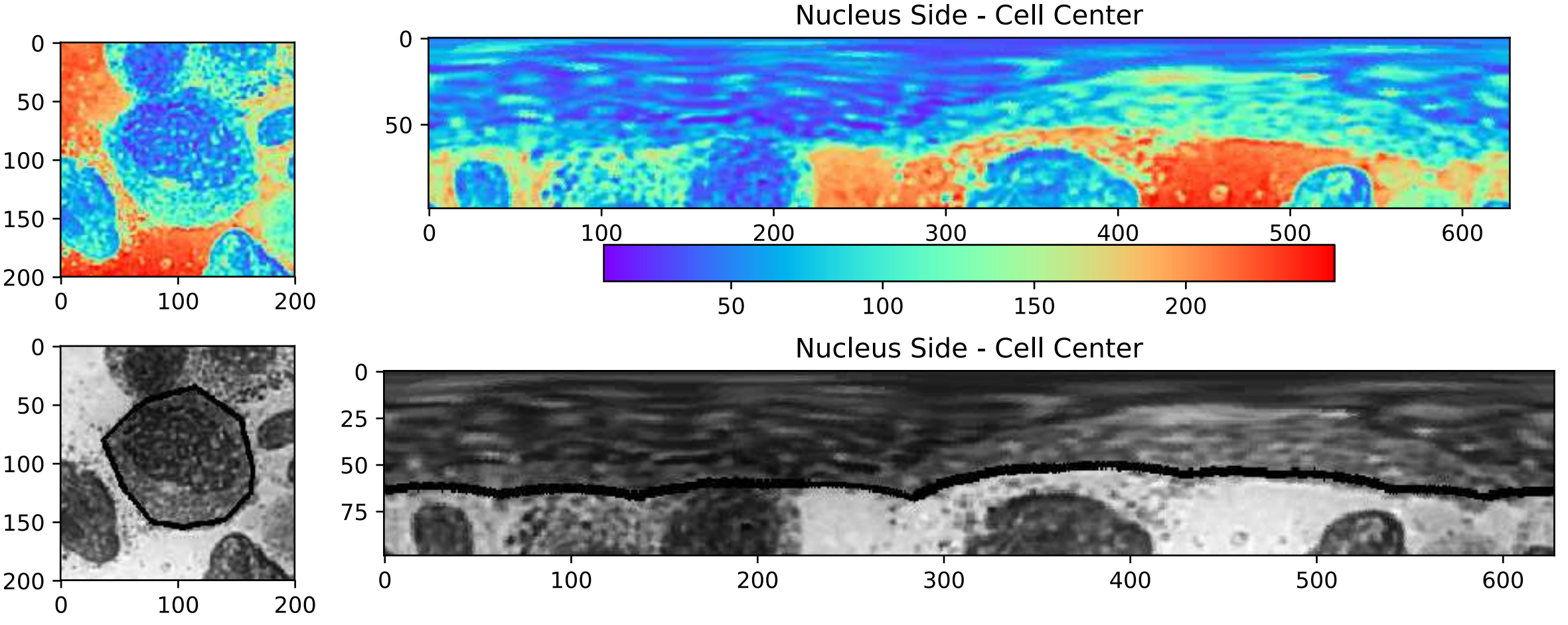


Gradient (CLAHE of L0)



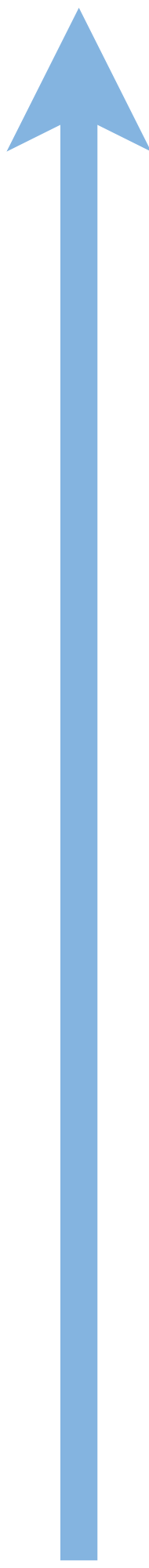
Methodology

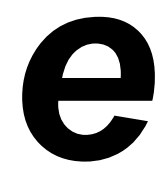

Nucleus Side - Cell Center
Nucleus Side - Cell Center

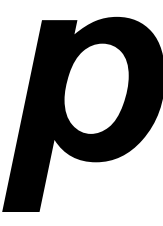

Nucleus Side - Cell Center
Nucleus Side - Cell Center

Ground-Truth contour

Normalisation







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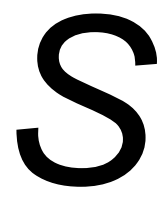

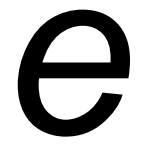

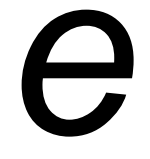

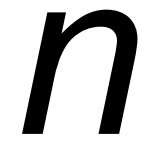

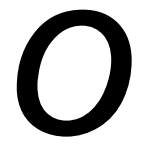

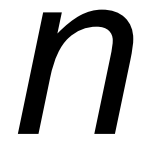

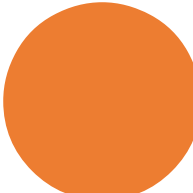

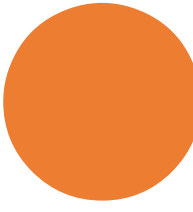

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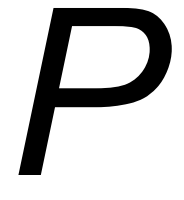
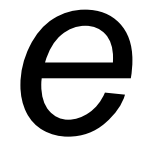
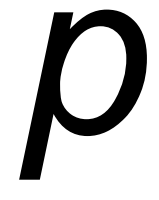
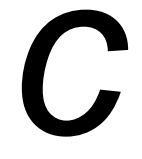
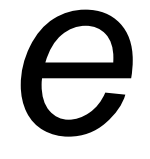
Methodology

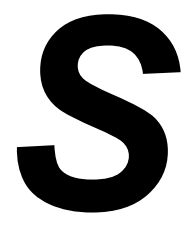


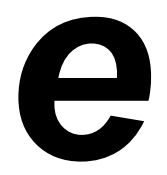
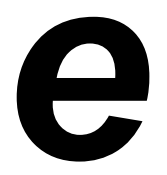
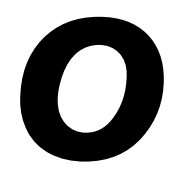








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