

Morphological Operations Applied to Digital Art Restoration

M. Kirbie Dramdahl

Division of Science and Mathematics
University of Minnesota, Morris
Morris, Minnesota, USA

29 April 2014
UMM CSci Senior Seminar Conference
University of Minnesota, Morris

Outline

- 1 Edge Detection
- 2 Morphological Operations
- 3 Methods of Crack Detection
- 4 Inpainting
- 5 Results
- 6 Conclusions

Outline

- 1 Edge Detection
- 2 Morphological Operations
- 3 Methods of Crack Detection
- 4 Inpainting
- 5 Results
- 6 Conclusions

Outline

- 1 Edge Detection
- 2 Morphological Operations
 - Erosion
 - Dilation
 - Opening
 - Closing
- 3 Methods of Crack Detection
- 4 Inpainting
- 5 Results

Outline

- 1 Edge Detection
- 2 Morphological Operations
- 3 Methods of Crack Detection**
 - Top-Hat Transform
 - Alternative Method
- 4 Inpainting
- 5 Results
- 6 Conclusions

Outline

- 1 Edge Detection
- 2 Morphological Operations
- 3 Methods of Crack Detection
- 4 Inpainting**
- 5 Results
- 6 Conclusions

Outline

- 1 Edge Detection
- 2 Morphological Operations
- 3 Methods of Crack Detection
- 4 Inpainting
- 5 Results**
 - Top-Hat Transform Results
 - Alternative Method Results
- 6 Conclusions

Outline

- 1 Edge Detection
- 2 Morphological Operations
- 3 Methods of Crack Detection
- 4 Inpainting
- 5 Results
- 6 Conclusions**

Thanks!

Thank you for your time and attention!

Contact: `dramd002@morris.umn.edu`

Questions?

References