

Data-driven Confocal Microscopy to Hematoxylin and Eosin Transformation

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Contents

- ▶ Introduction
- ▶ Theoric background
- ▶ Methodology
- ▶ Experiments and results
- ▶ Conclusions and future development



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- ▶ Theoric background
- ▶ Methodology
- ▶ Experiments and results
- ▶ Conclusions and future development



Contents

- ▶ Introduction
- ▶ Theoric background
- ▶ Methodology
- ▶ Experiments and results
- ▶ Conclusions and future development



Contents

- ▶ Introduction
- ▶ Theoric background
- ▶ Methodology
- ▶ Experiments and results
- ▶ Conclusions and future development



Contents

- ▶ Introduction
- ▶ Theoric background
- ▶ Methodology
- ▶ Experiments and results
- ▶ Conclusions and future development



Introduction

- Confocal microscopy
- Hematoxylin and Eosin (H&E)
- Data-driven transformation

Theoric background

Methodology

- Datasets
- Despeckling
- Stain
- Inference technique

Experiments and results

- Despeckling
- Stain



What is it?



Modes



Similarities



Why?



How?



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Convolutional neural networks (CNNs)



Generative adversarial networks (GANs)



Cicle-consistent GANs (CycleGANs)



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Theoric background

Methodology

Datasets
Despeckling
Stain
Inference technique

Experiments and results

Despeckling
Stain



Confocal dataset



H&E



Speckle noise



Despeckling network



Residual network



UNet-like network



Why?



"no-overlap" method



"pyramid" method



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Theoric background

Methodology

Datasets
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Stain
Inference technique

Experiments and results

Despeckling
Stain



Experiments



Experiments

