

Deep Restore

Inpainting Comparision

October 15, 2018

Description

- ▶ Comparison of 3 CNN approaches + 1 Perona-Malik architecture
- ▶ for the CNN approaches, we copy the input image to the path over the network
- ▶ The Perona-Malik method uses following parameters (look at comparison perona-malik for parameter description):
 - ▶ α : 0.005
 - ▶ γ : 0.001
 - ▶ τ : 5
 - ▶ end time: 15
 - ▶ σ_g : 0.7
 - ▶ σ_t : 1.5

Train - Ex1



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3

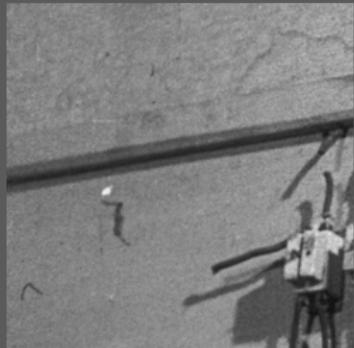


(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex2



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex3



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask

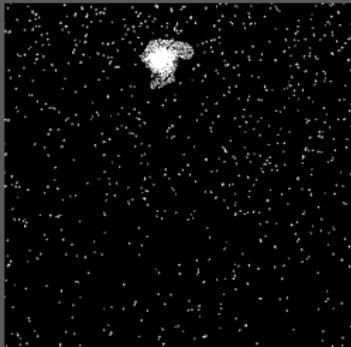


(d) Perona-Malik

Train - Ex4



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex5



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask

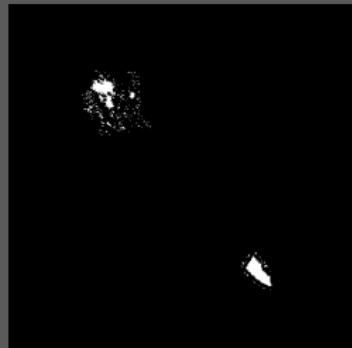


(d) Perona-Malik

Train - Ex6



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex7



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask

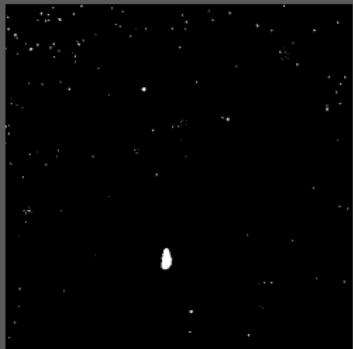


(d) Perona-Malik

Train - Ex8



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex9



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex10



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask

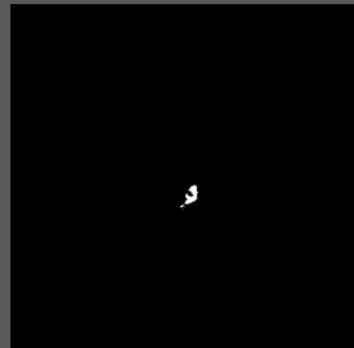


(d) Perona-Malik

Train - Ex11



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask

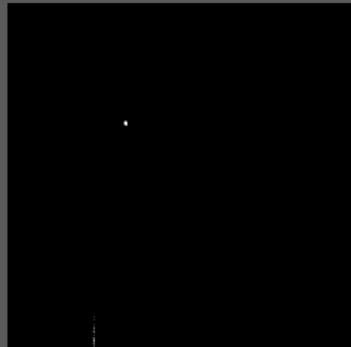


(d) Perona-Malik

Train - Ex12



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex13



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask

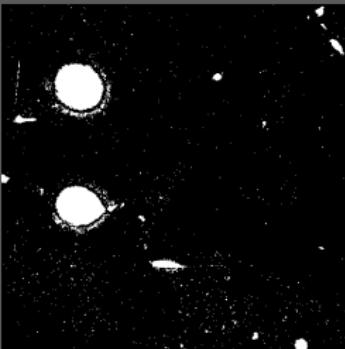


(d) Perona-Malik

Train - Ex14



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik

Train - Ex15



(a) Input



(b) Mask



(c) GT Output



(a) bias -0.5



(b) bias -3



(c) bias -3, with
mask



(d) Perona-Malik