

Laplacian Patch-Based Image Synthesis

Supplementary Materials

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Comparisons



Input



Ours*



Darabi et al. 2012*



Wexler et al. 2007*



Drori et al. 2003



Criminisi et al. 2002



Input



Ours*



Darabi et al. 2012*



Wexler et al. 2007*



Drori et al. 2003



Criminisi et al. 2002



Input



Ours*



Darabi et al. 2012*



Wexler et al. 2007*



Drori et al. 2003



Criminisi et al. 2002

* 7-by-7 patch size



Input



Ours*



Darabi et al. 2012*



Wexler et al. 2007*



Drori et al. 2003



Criminisi et al. 2002



Input



Ours*



Darabi et al. 2012*



Wexler et al. 2007*



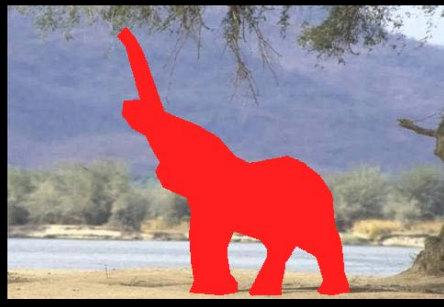
Drori et al. 2003



Criminisi et al. 2002

* 7-by-7 patch size

Additional Results of Our Method



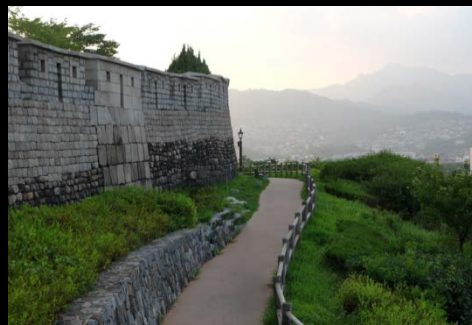
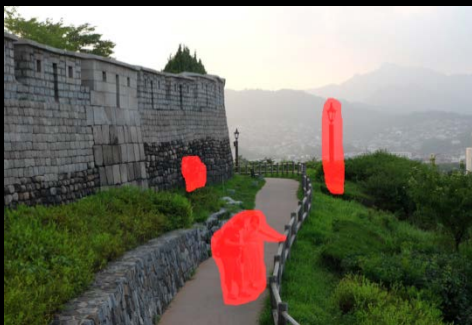
Input

Ours

Input

Ours

* Parameters vary for best performance.



Input

Ours

Input

Ours

* Parameters vary for best performance.

Comparison

with Darabi et al. 2012 (Other Gradient-based)



Input





Ours

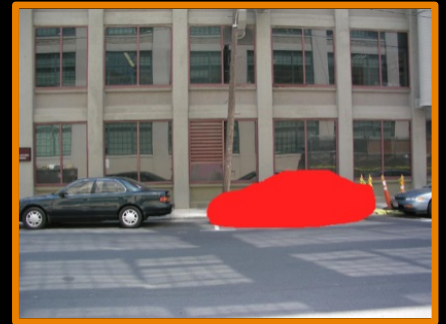




Darabi et al. 2012



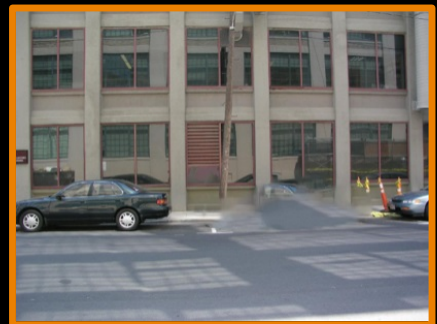
Input





Ours





Darabi et al. 2012



Input



Ours



Darabi et al. 2012

Comparison

with Other Laplacian-Based Methods



Drori et al. 2003

Padmavathi and
Soman 2011*

Ours*

* 7-by-7 patch size

Comparison

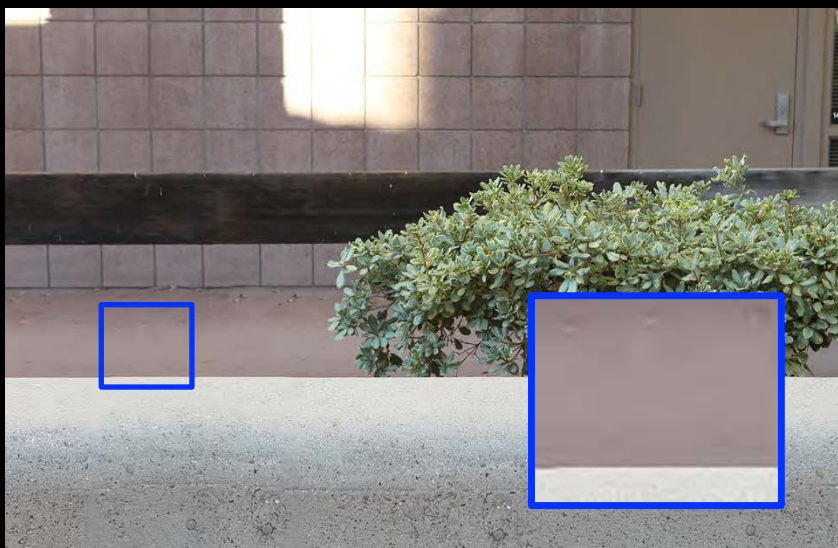
with Kalantari et al. 2014
(Multi-layer Approach)



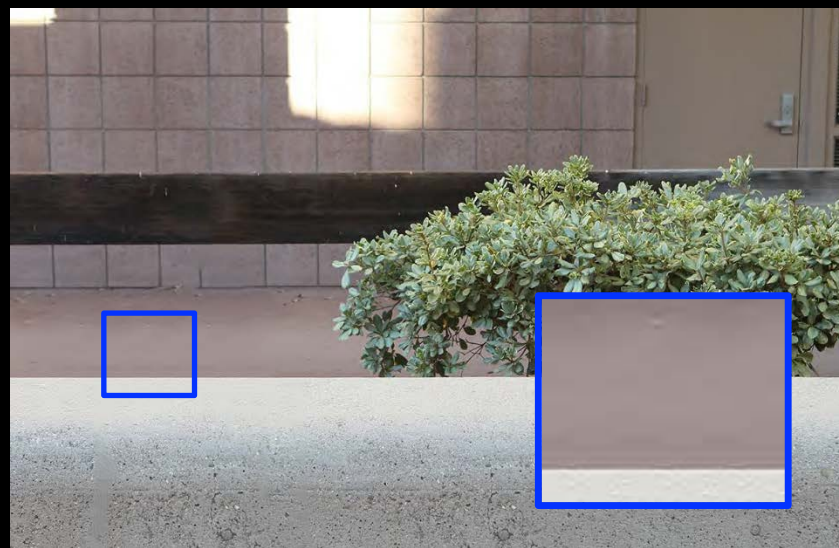
Input



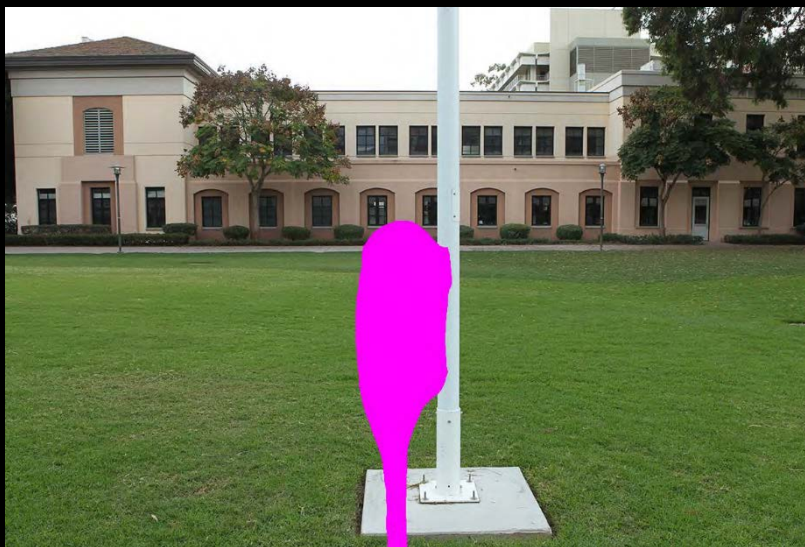
Photoshop



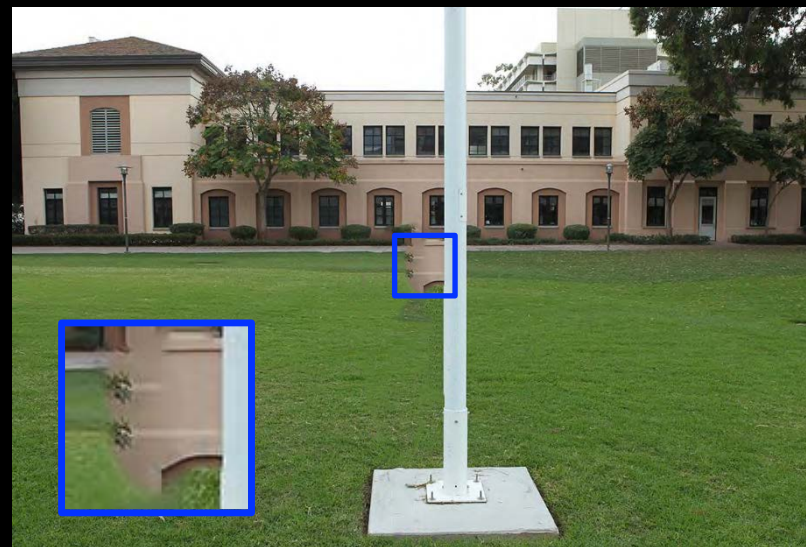
Kalantari et al. 2014



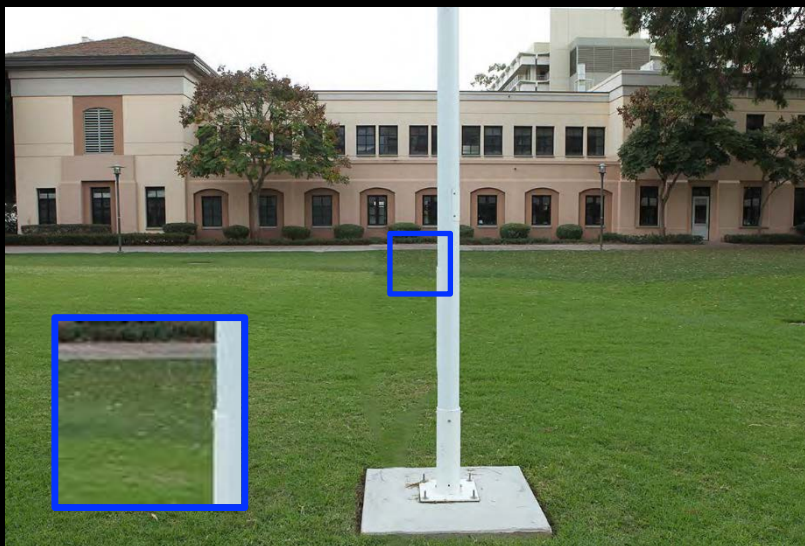
Ours



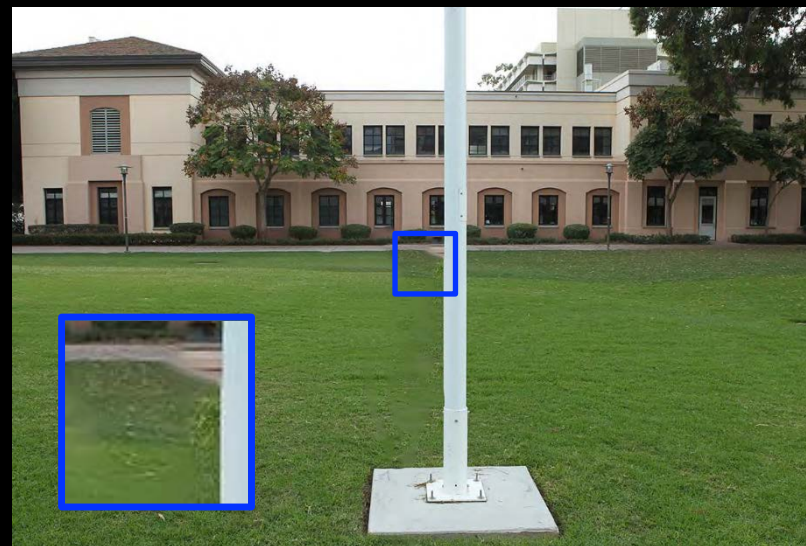
Input



Photoshop



Kalantari et al. 2014



Ours

Internal Evaluation

Upsampled Gaussian Pyramid
vs. Gaussian Pyramid



Input



Gaussian*



Upsampled Gaussian*
(Our Choice)

Upsampled
Gaussian
(Our Choice)



Gaussian



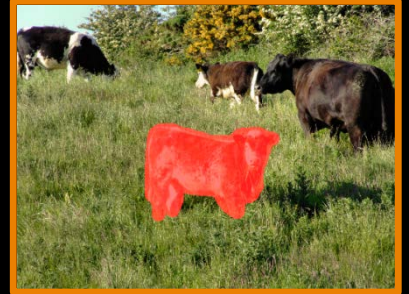
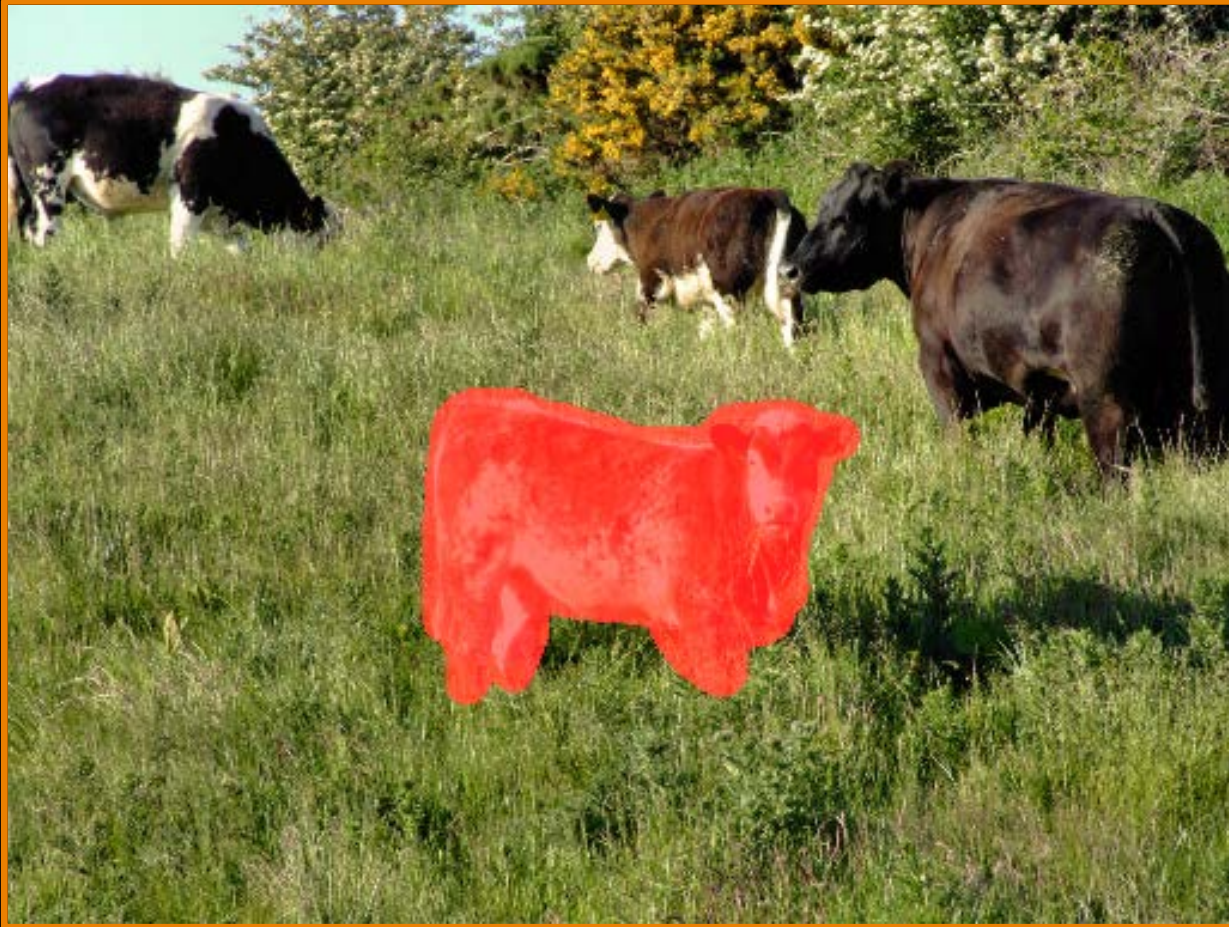
5-by-5

7-by-7

9-by-9

Internal Evaluation

Effect of Parameter β in Eq. (3)



Input



$$\beta = 0$$



$$\beta = 0.3$$

Artifacts

(Failure Cases)



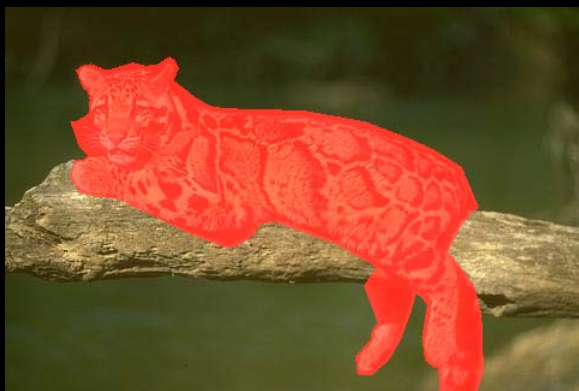
Input



Ours



Darabi et al. 2012



Input



Ours



Darabi et al. 2012