

Blind Deblurring Using Internal Patch Recurrence

Visual results with full-sized images

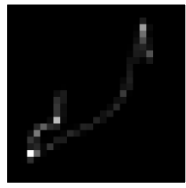
Tomer Michaeli & Michal Irani

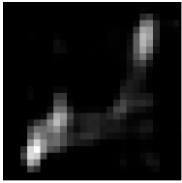
ECCV 2014

Blurry Input Image



Deblurring with Ground-Truth Kernel

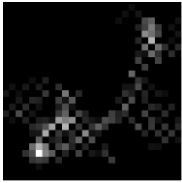




Our

Error ratio: 2.73





Sun *et al.*

Error ratio: 10.27



Xu & Jia

Error ratio: 9.65



Levin *et al.*

Error ratio: 10.52



Cho & Lee

Error ratio: 11.01



Cho *et al.*

Error ratio: 61.15



Krishnan *et al.*

Error ratio: 24.19



Blurry Input Image

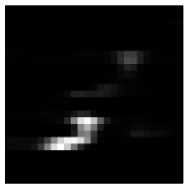


Deblurring with Ground-Truth Kernel



Our

Error ratio: 4.26



Sun *et al.*

Error ratio: 6.45



Xu & Jia

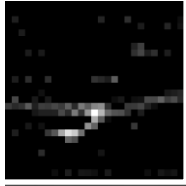
Error ratio: 16.99

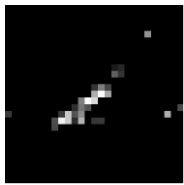


Levin *et al.*

Error ratio: 20.30









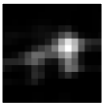
Blurry Input Image





Deblurring with Ground-Truth Kernel





Our

Error ratio: 3.52

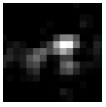




Sun *et al.*

Error Ratio: 7.01





Xu & Jia

Error ratio: 11.50



Levin *et al.*

Error ratio: 15.56



Cho & Lee

Error ratio: 59.32





Cho *et al.*

Error ratio: 1.66





Krishnan *et al.*

Error ratio: 18.32



Blurry Input Image



Deblurring with Ground-Truth Kernel



Our

Error ratio: 3.17



Sun et al.

Error ratio: 12.82



Xu & Jia

Error ratio: 5.90



Levin *et al.*

Error ratio: 23.15



Cho & Lee

Error ratio: 15.57

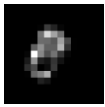






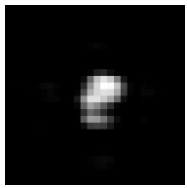
Blurry Input Image





Deblurring with Ground-Truth Kernel

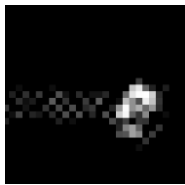




Our



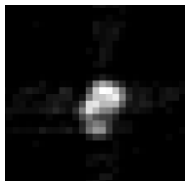
Error ratio: 1.90



Sun *et al.*

Error ratio: 8.87

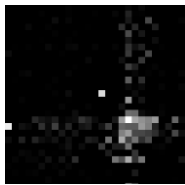




Xu & Jia

Error ratio: 6.07

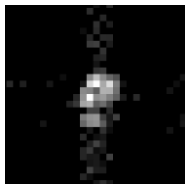




Levin *et al.*



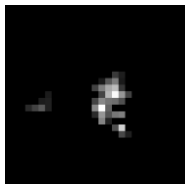
Error ratio: 14.20



Cho & Lee

Error ratio: 12.42

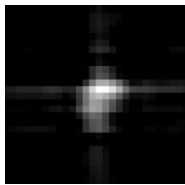




Cho et al.

Error ratio: 4.19





Krishnan *et al.*



Error ratio: 11.60

Blurry Input Image



Deblurring with Ground-Truth Kernel



Our

Error ratio: 2.24



Sun *et al.*

Error ratio: 3.15



Xu & Jia

Error ratio: 16.66



Levin *et al.*

Error ratio: 3.09

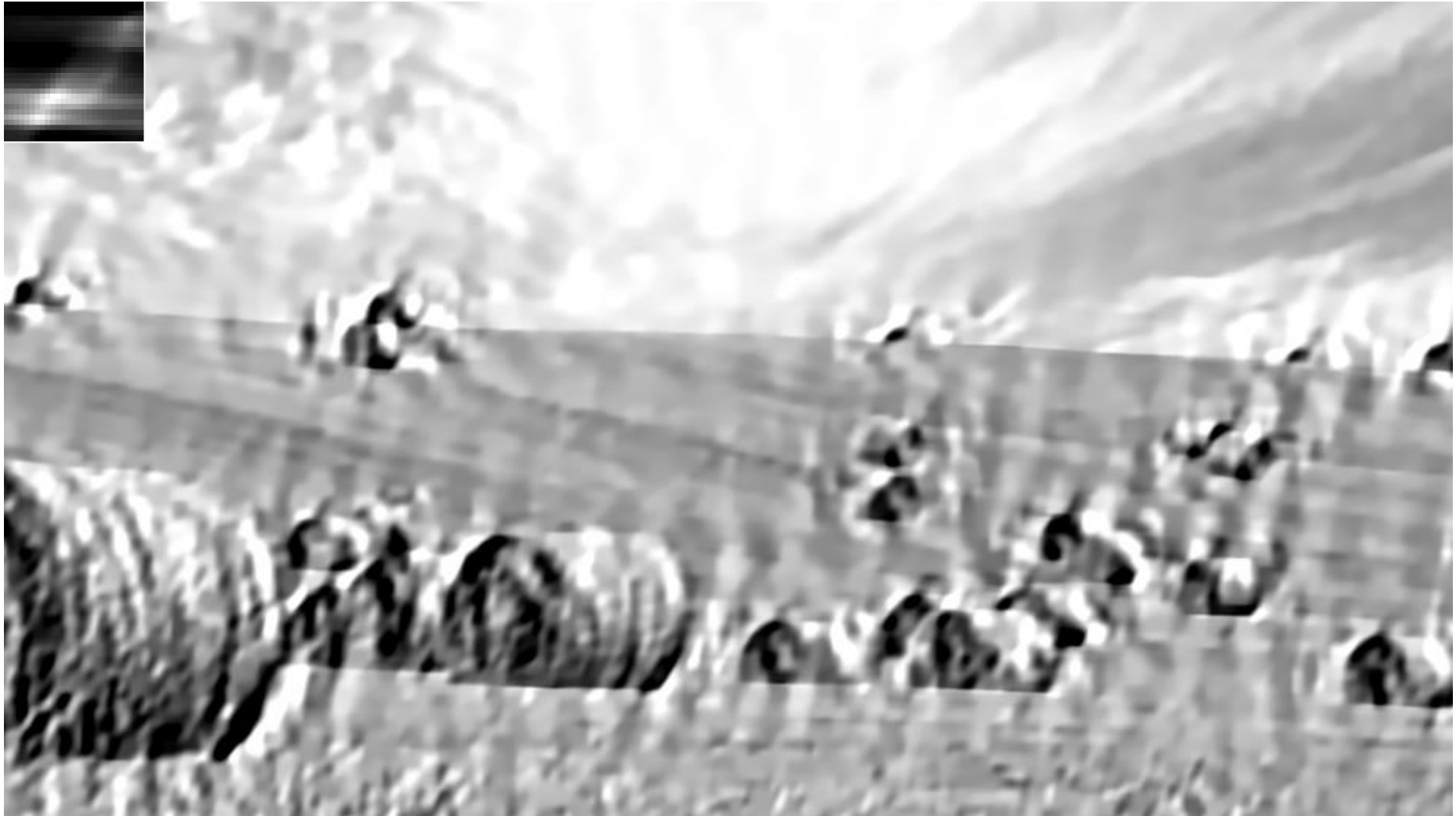




Cho *et al.*

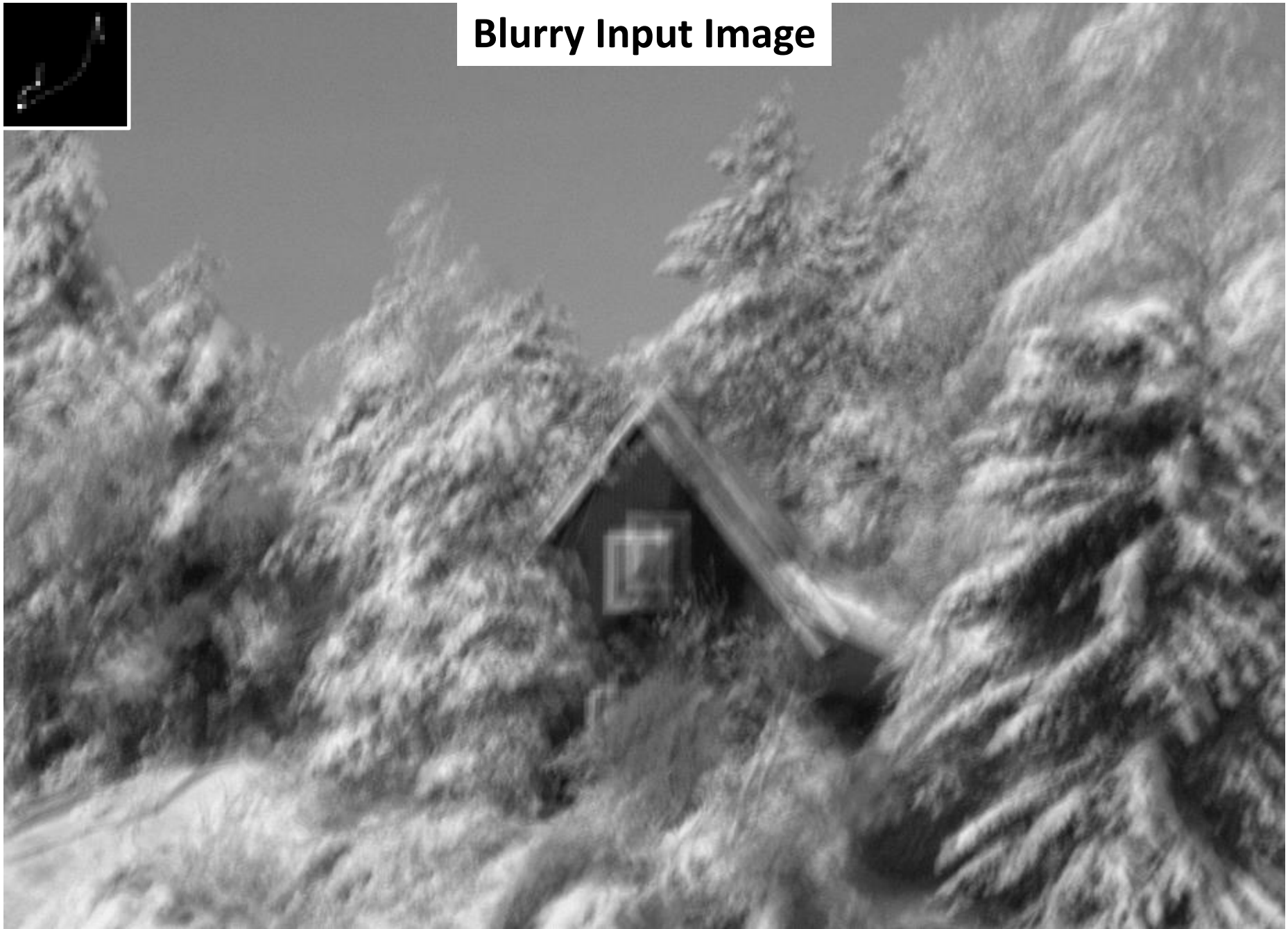
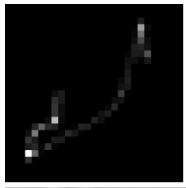
Error ratio: 18.24





Our Worst Result

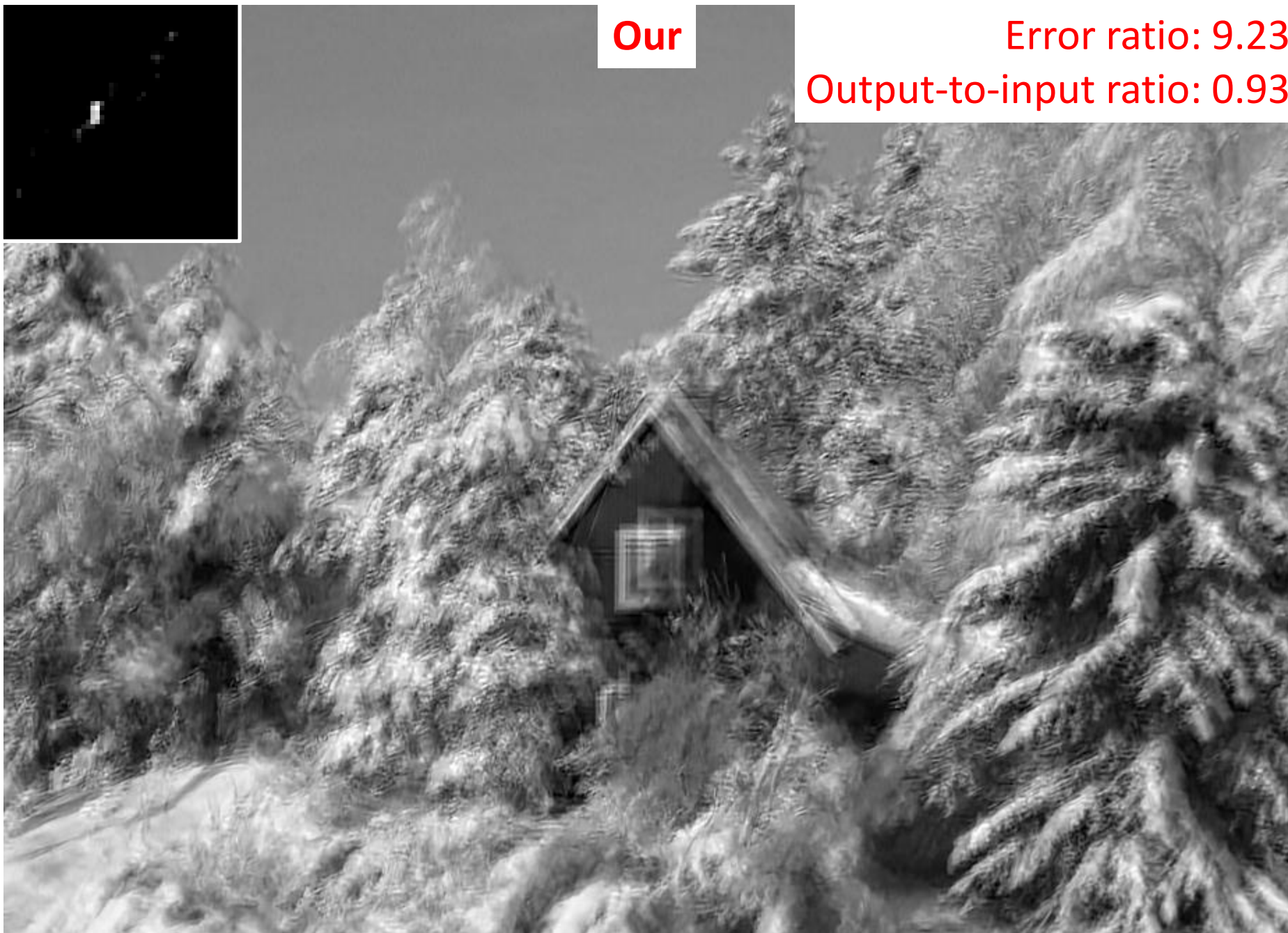
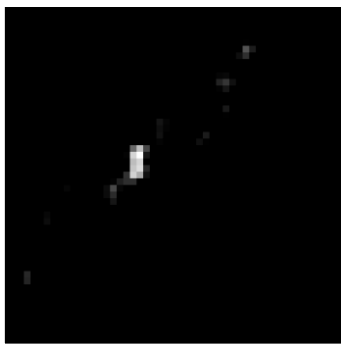
Blurry Input Image



Our

Error ratio: 9.23

Output-to-input ratio: 0.93



The Worst Result of Sun *et al.*

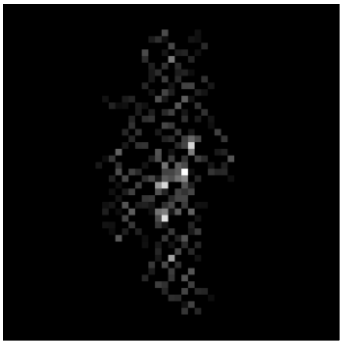
Blurry Input Image



Sun et al.

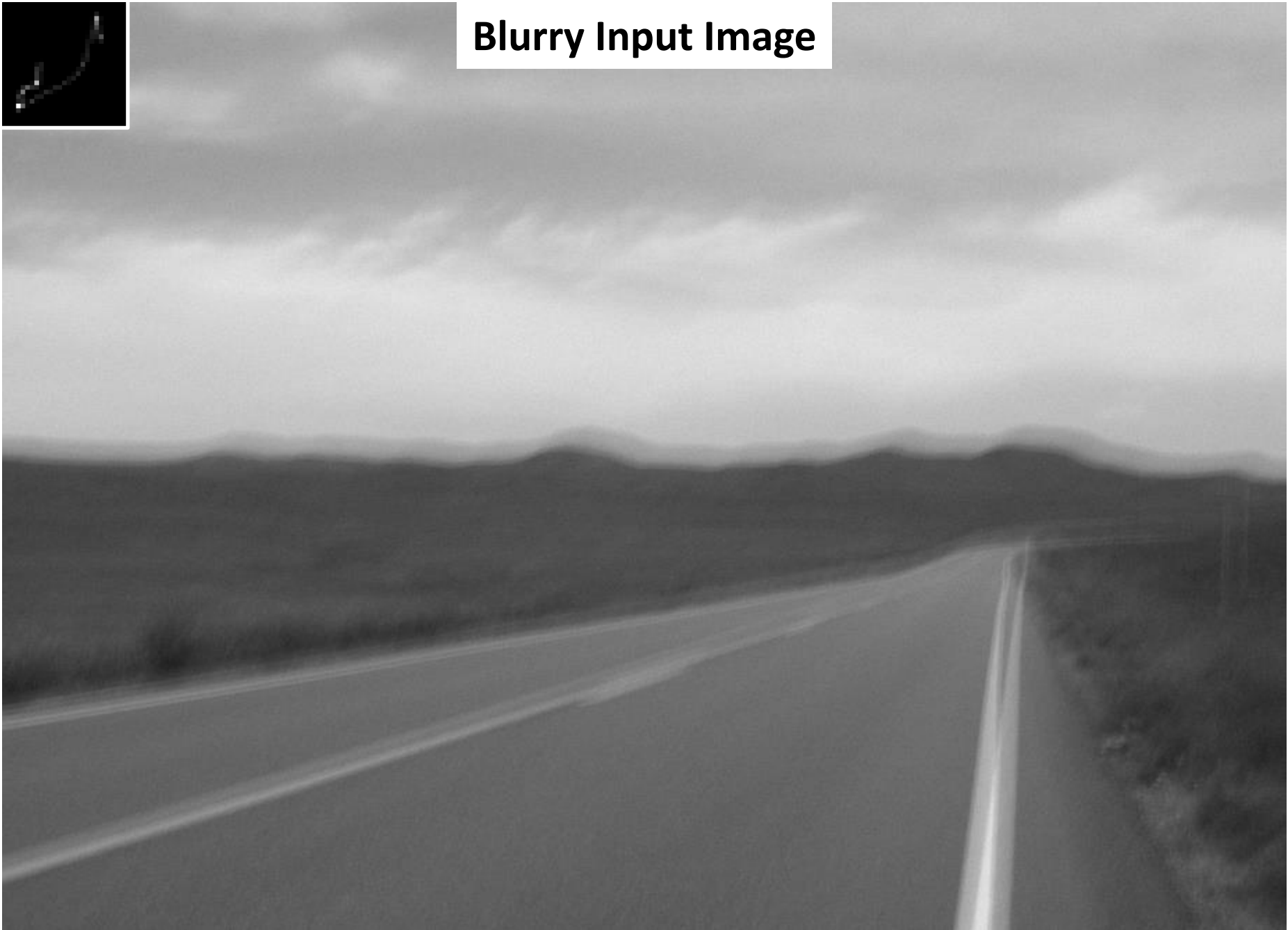
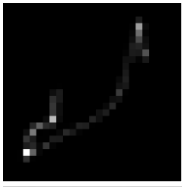
Error ratio: 23.15

Output-to-input ratio: 8.93



The Worst Result of Xu & Jia

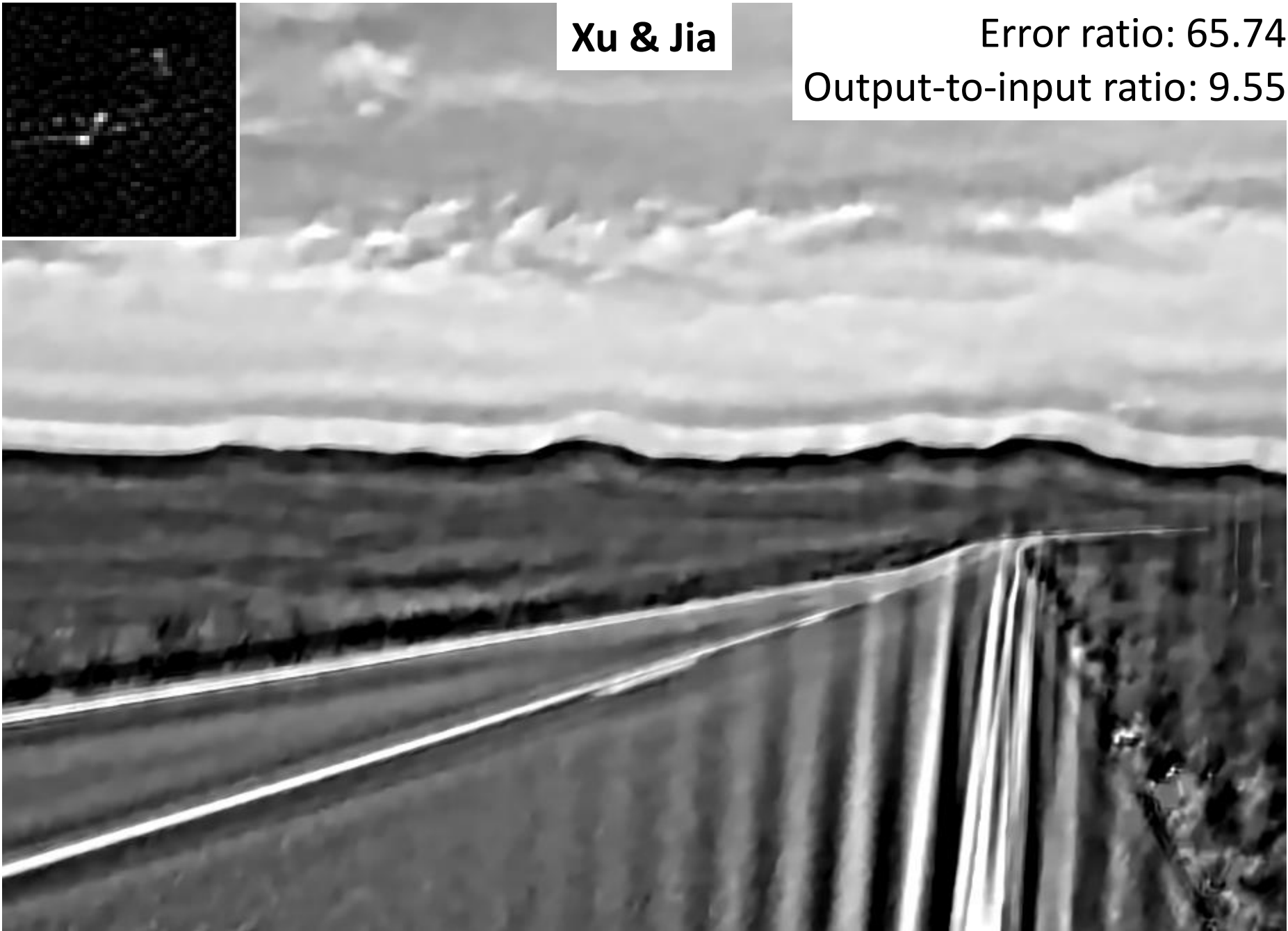
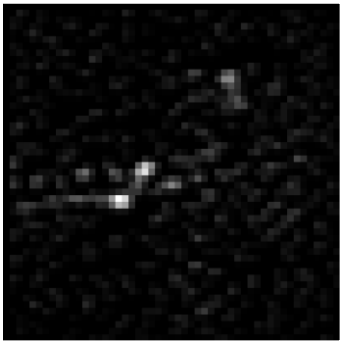
Blurry Input Image



Xu & Jia

Error ratio: 65.74

Output-to-input ratio: 9.55



The Worst Result of Levin *et al.*

Blurry Input Image



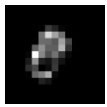
Levin *et al.*

Error ratio: 41.23

Output-to-input ratio: 8.69

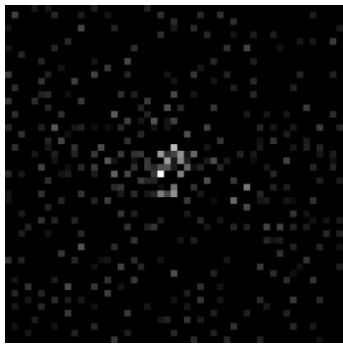


The Worst Result of Cho & Lee



Blurry Input Image





Cho & Lee



Error ratio: 112.6

Output-to-input
ratio: 37.24

The Worst Result of Cho *et al.*

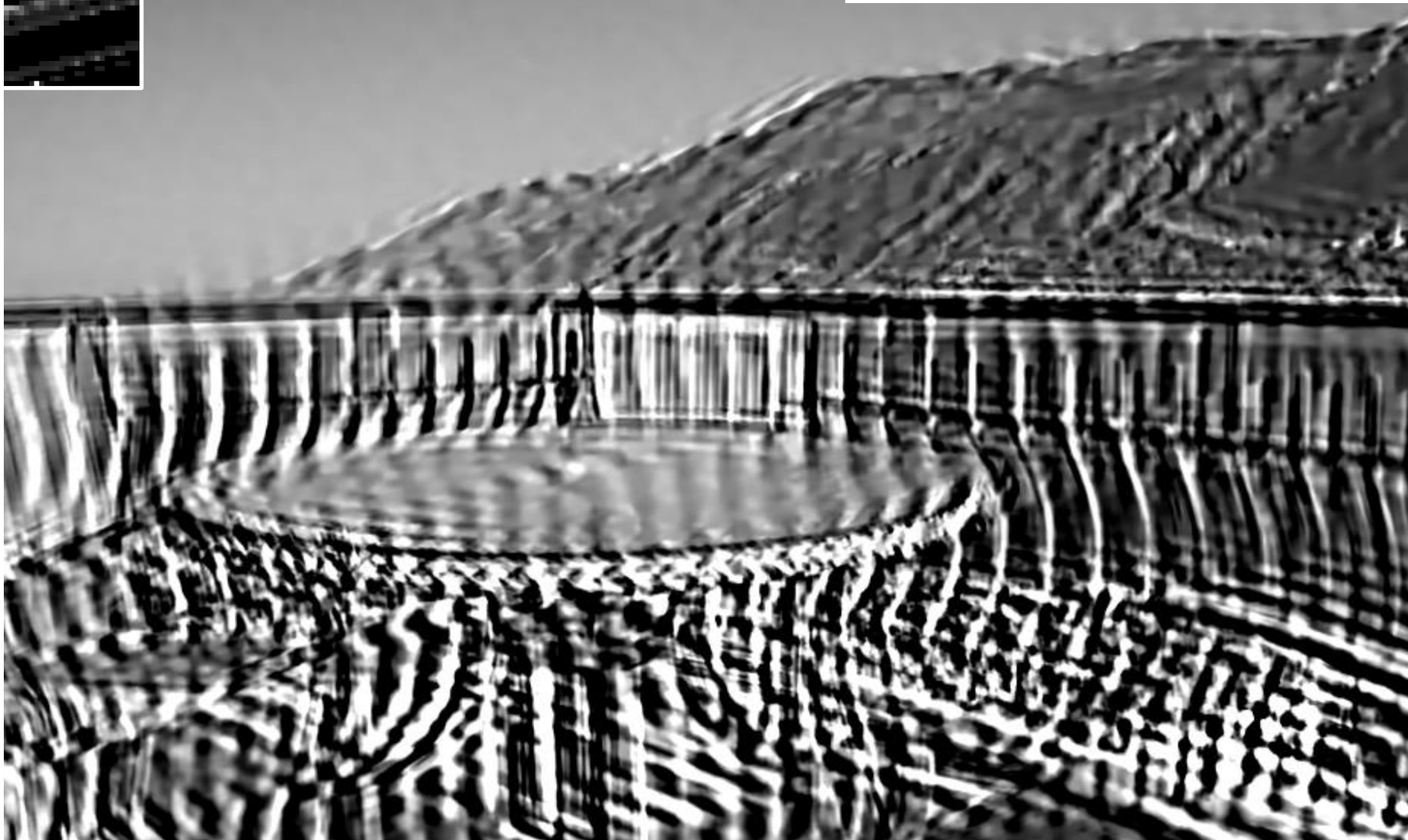
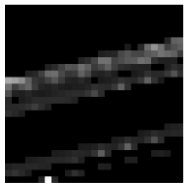
Blurry Input Image



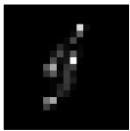
Cho *et al.*

Error ratio: 165.57

Output-to-input ratio: 30.42



The Worst Result of Krishnan *et al.*



Blurry Input Image



Krishnan *et al.*

Error ratio: 133.65

Output-to-input
ratio: 48.88

