Deep Defocus Map Estimation using Domain Adaptation

-Supplementary material-

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[2]sungkil@skku.edu

[3]scho@dgist.ac.kr

Closed-up views for Figures in the main paper

Figure 3: Outputs generated with combined subnetworks in our network.

Input

$DMENet_B$

$DMENet_{BD}$

$DMENet_{BDC}$

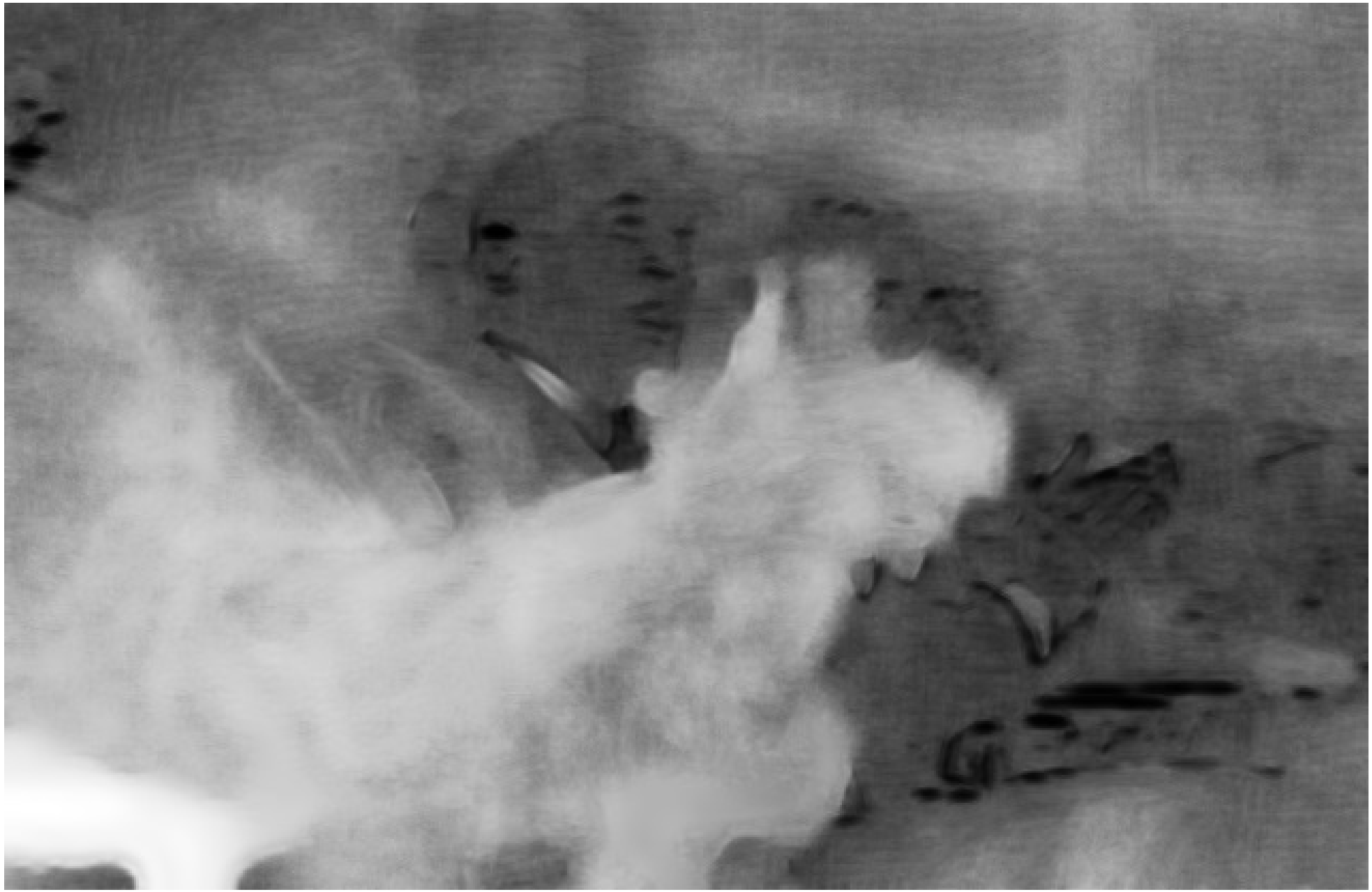
$DMENet_{BDCS}^{w/o\ L_{aux}}$

$DMENet_{BDCS}$

GT

Input

$DMENet_B$

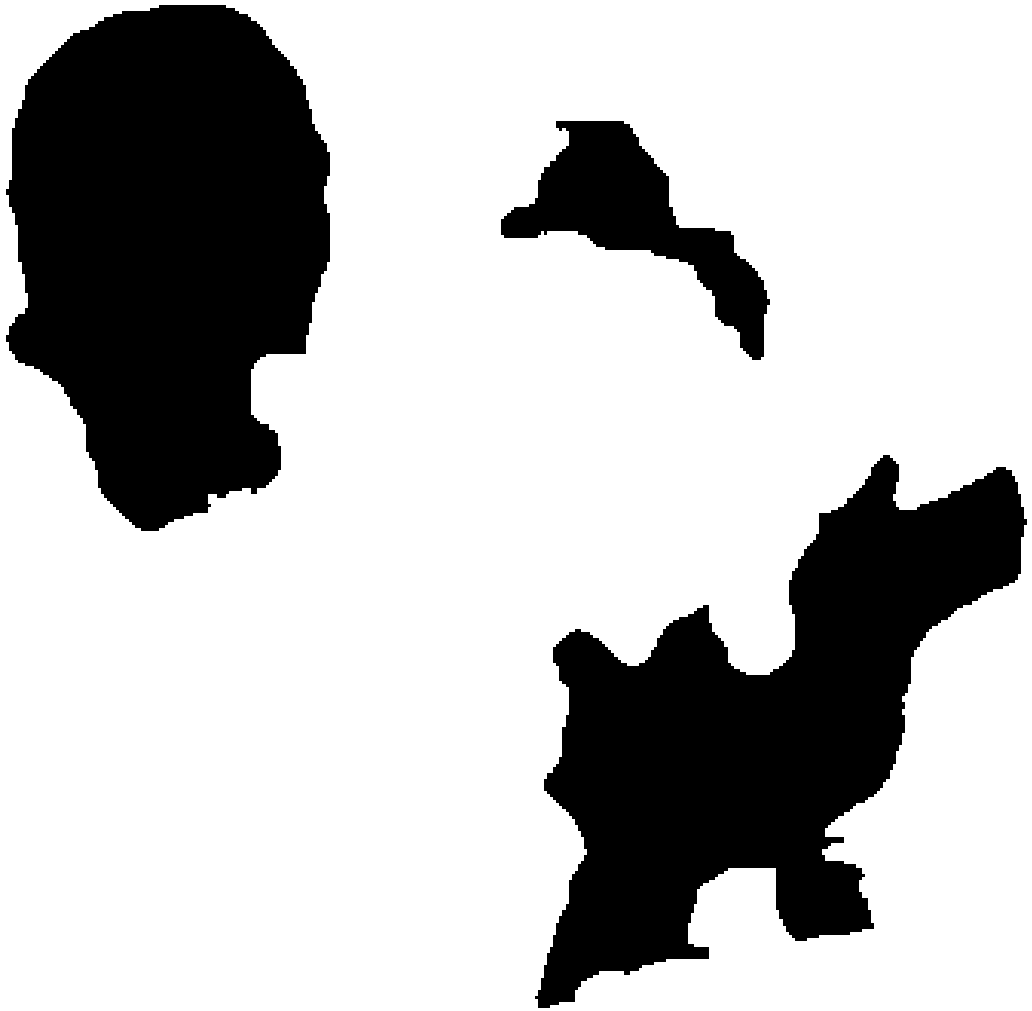


$DMENet_{BD}$

$DMENet_{BDC}$

$DMENet_{BDCS}^{w/o\ L_{aux}}$

$DMENet_{BDCS}$



GT (Binary blur map)

Figure 6: Qualitative comparison with [7].

Input

Defocus map estimated by [7]

Defocus map estimated by ours

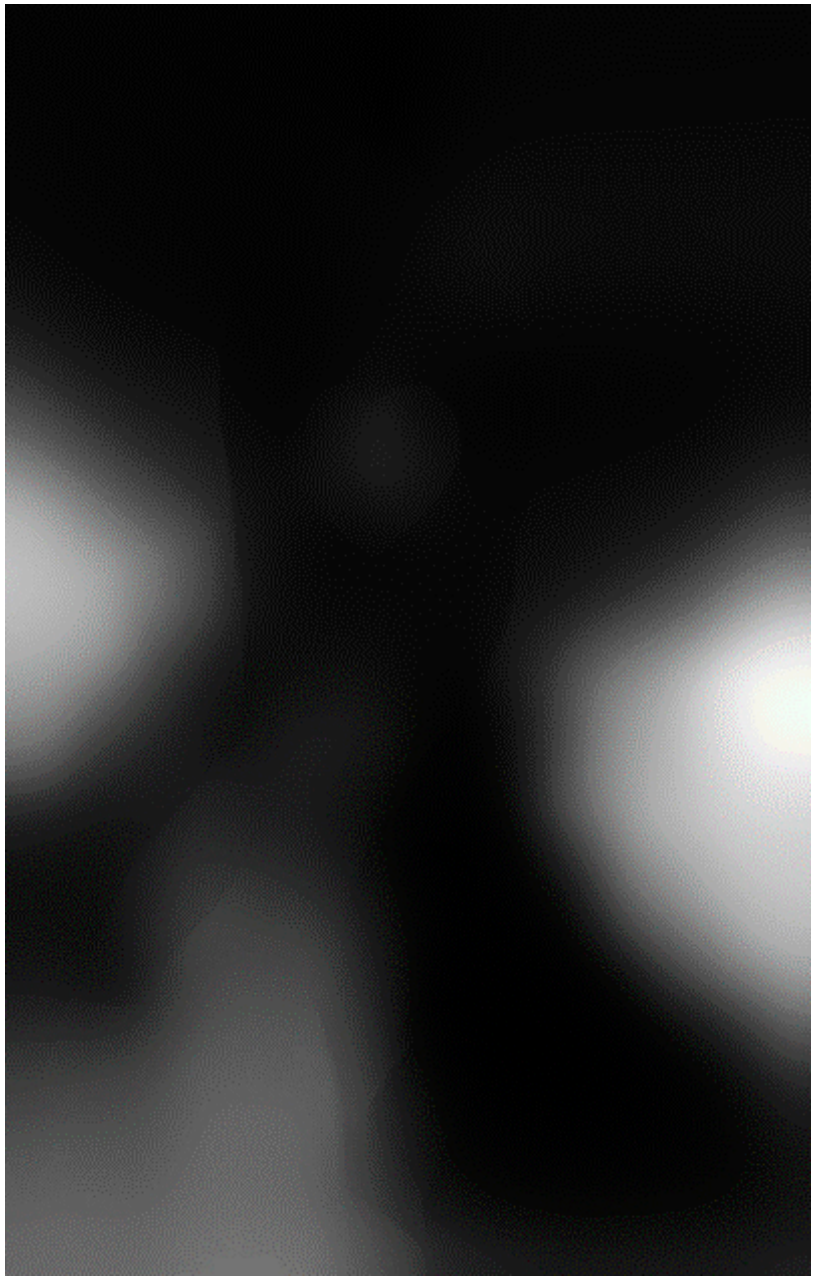
Figure 7: Qualitative comparison between $DMENet_{BDCS}$ and other methods.

Input

Zhou *et al.*[3]

Shi *et al.* [4]

Park *et al.* [5]



Karaali *et al.* [6]

Ours

GT (Binary blur map)

Input

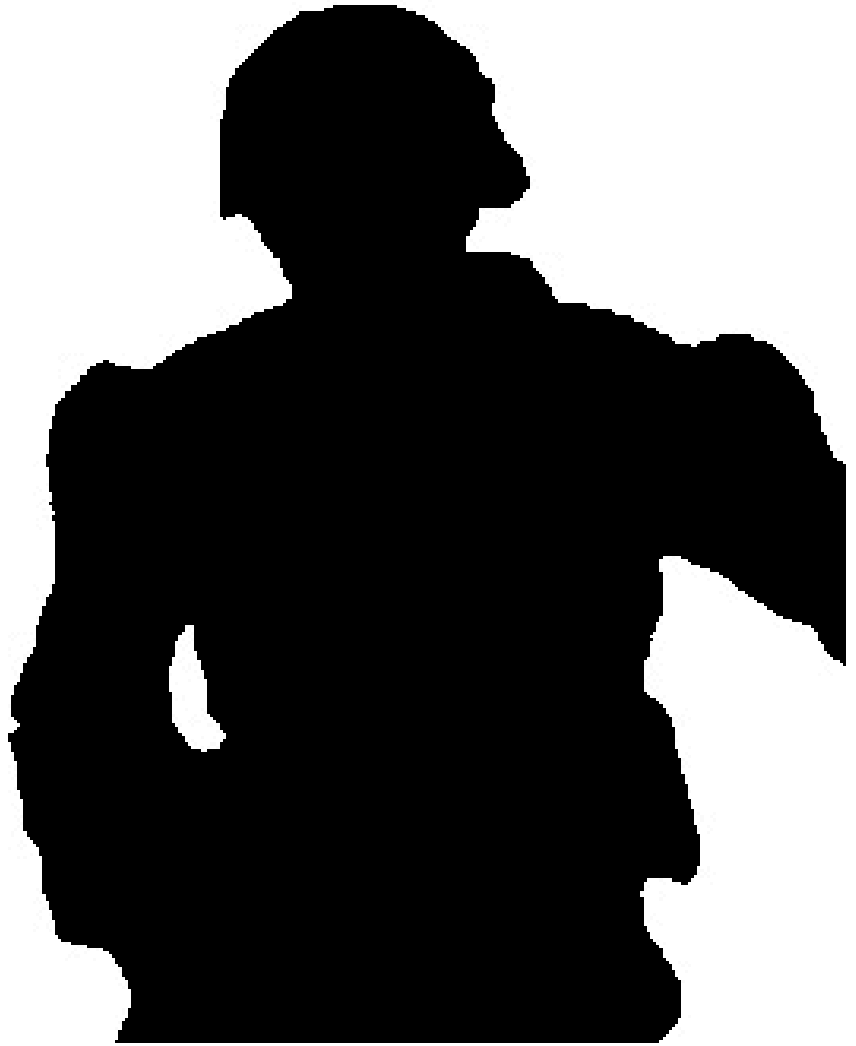
Zhou *et al.*[3]

Shi *et al.* [4]

Park *et al.* [5]

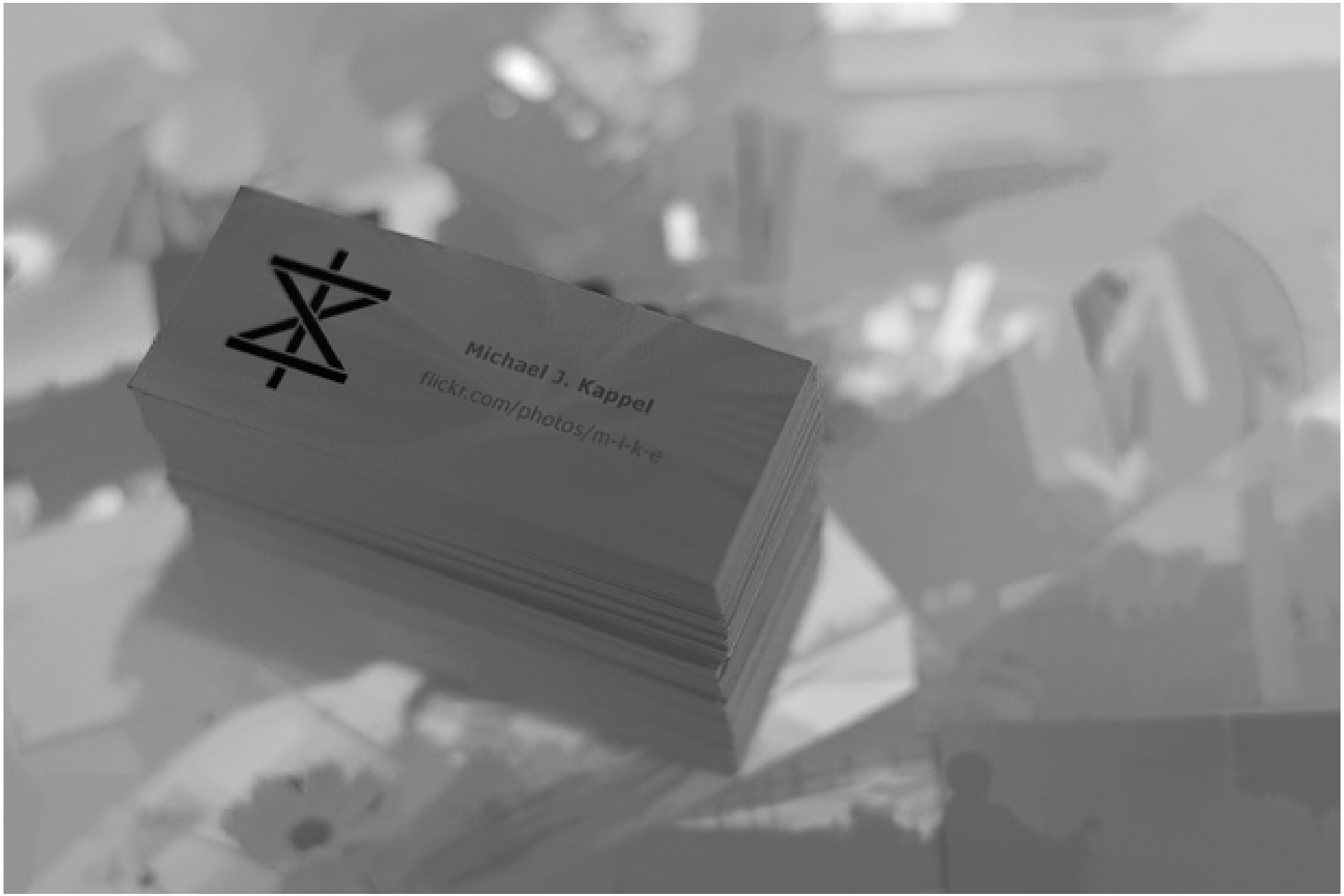
Karaali *et al.* [6]

Ours



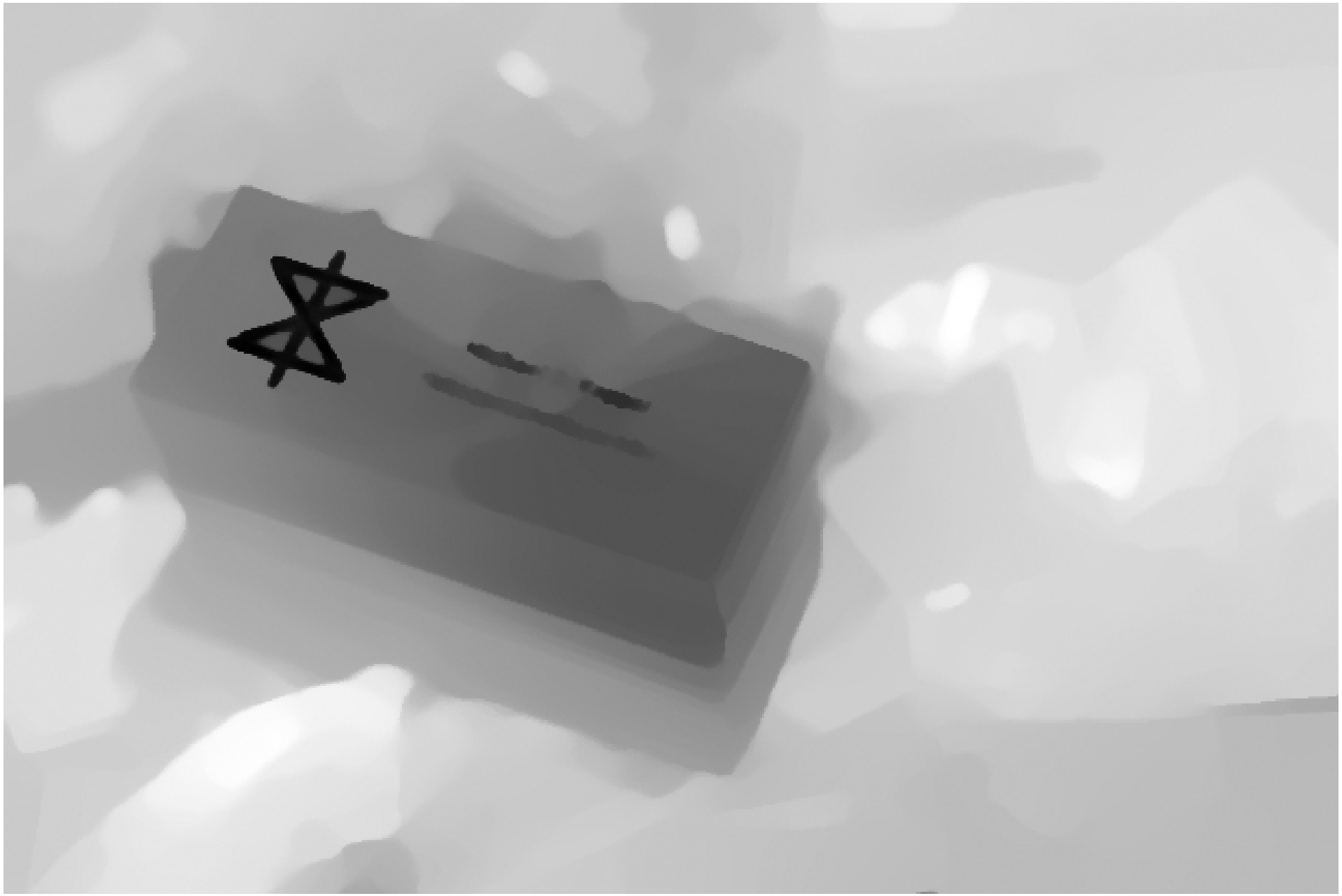
GT (Binary blur map)

Input

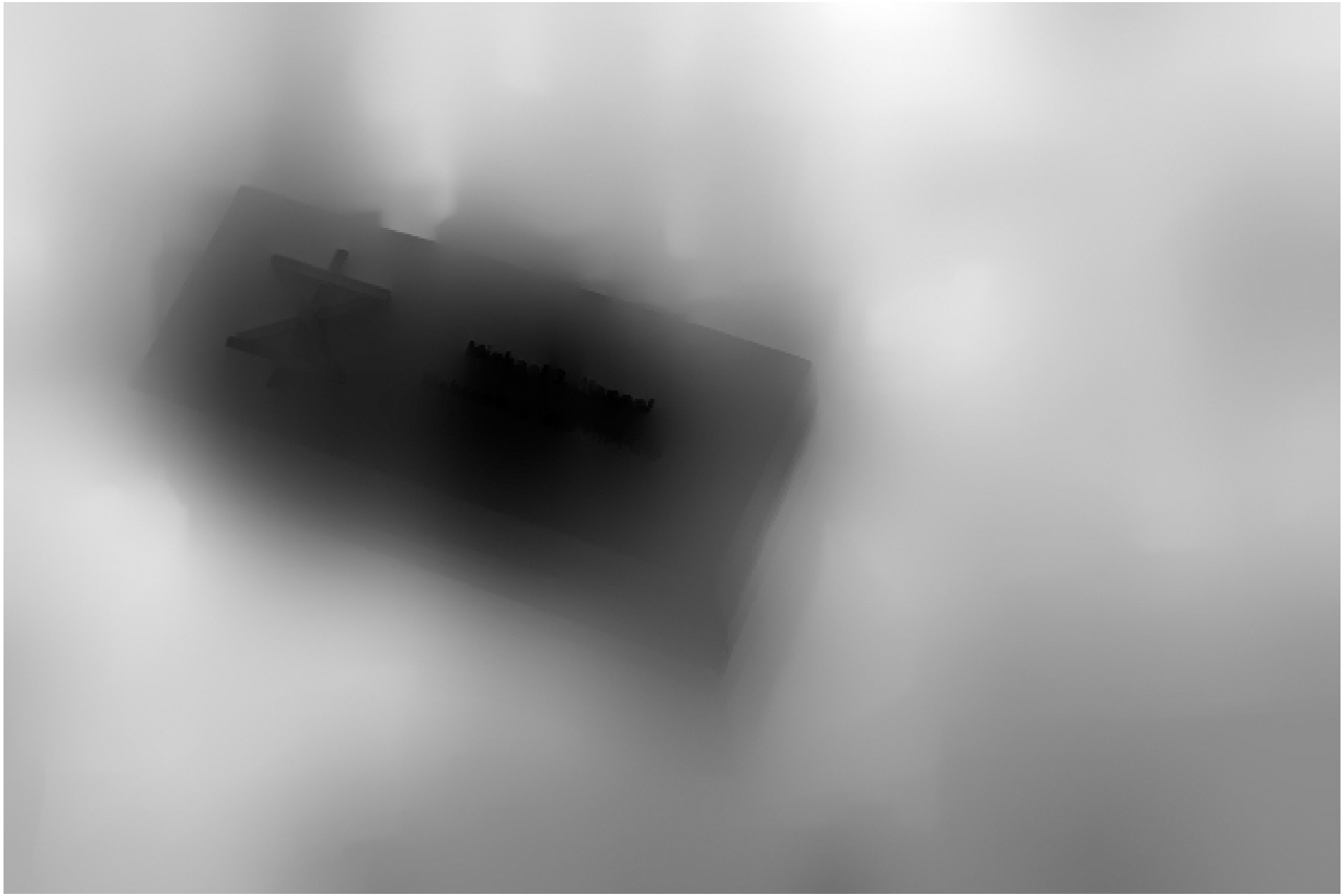


Zhou *et al.*[3]

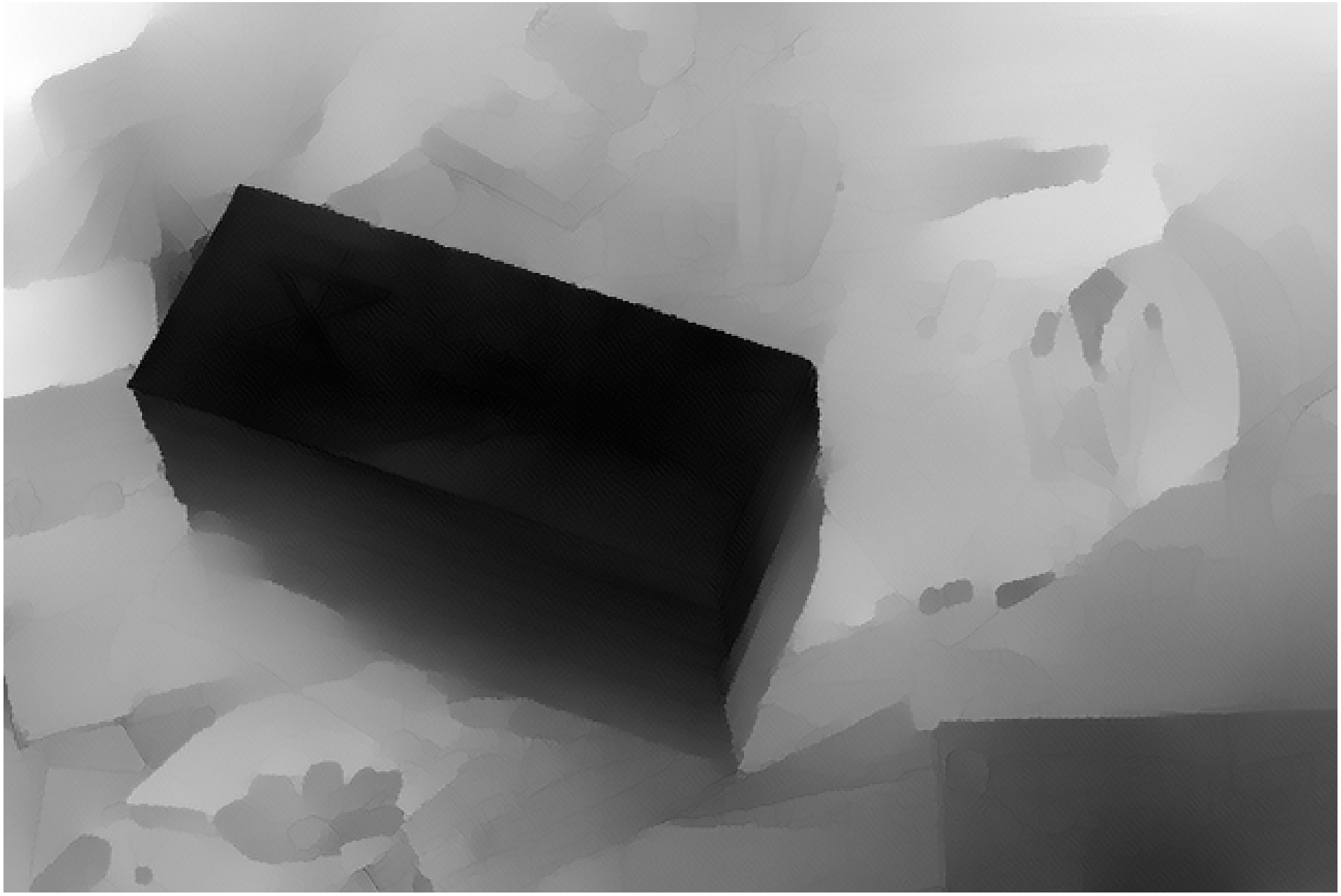
Shi *et al.* [4]



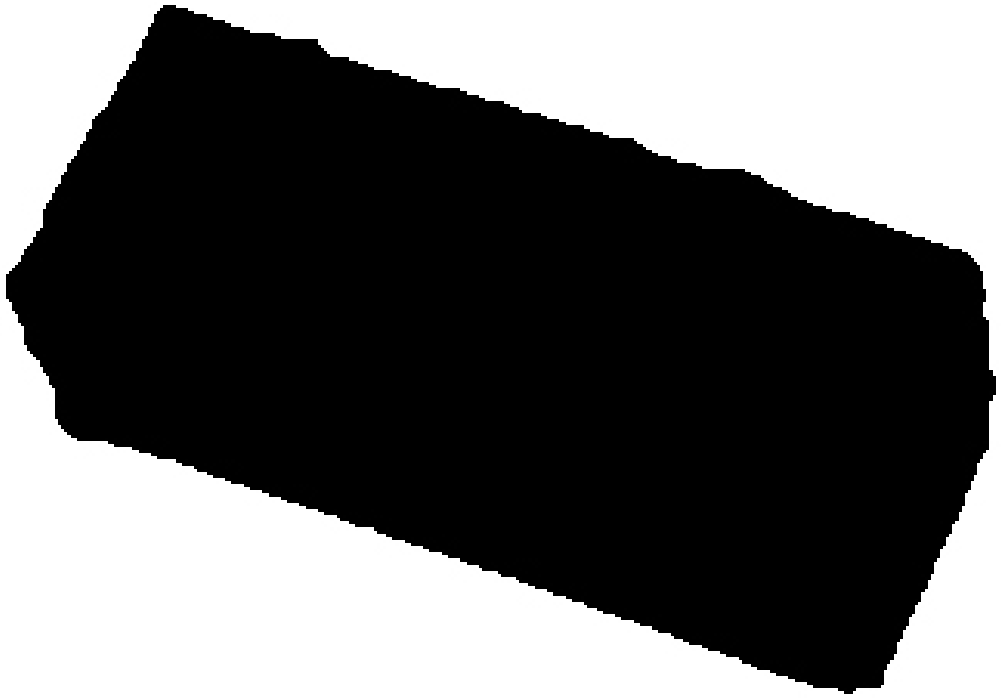
Park *et al.* [5]



Karaali *et al.* [6]



Ours

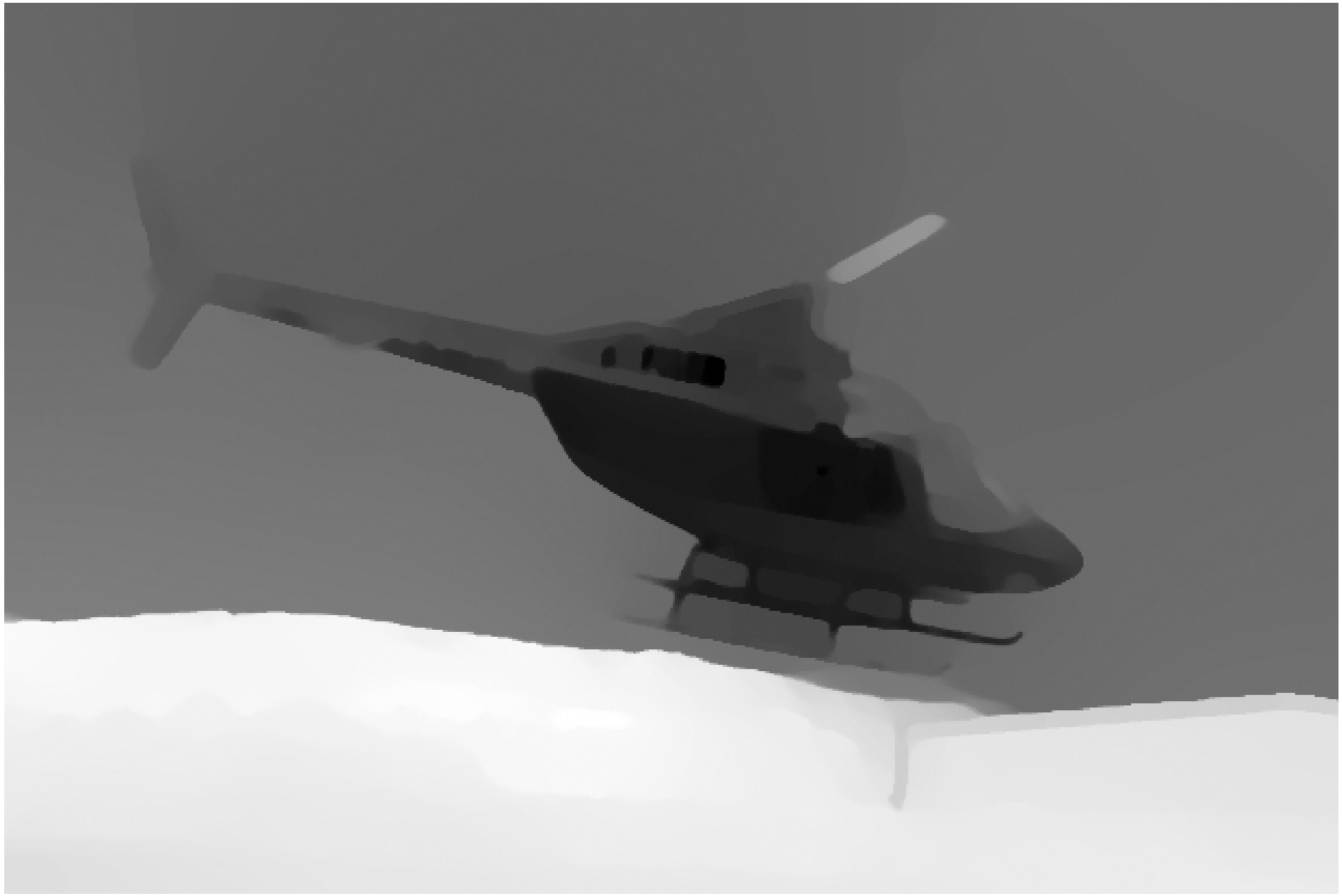


GT (Binary blur map)

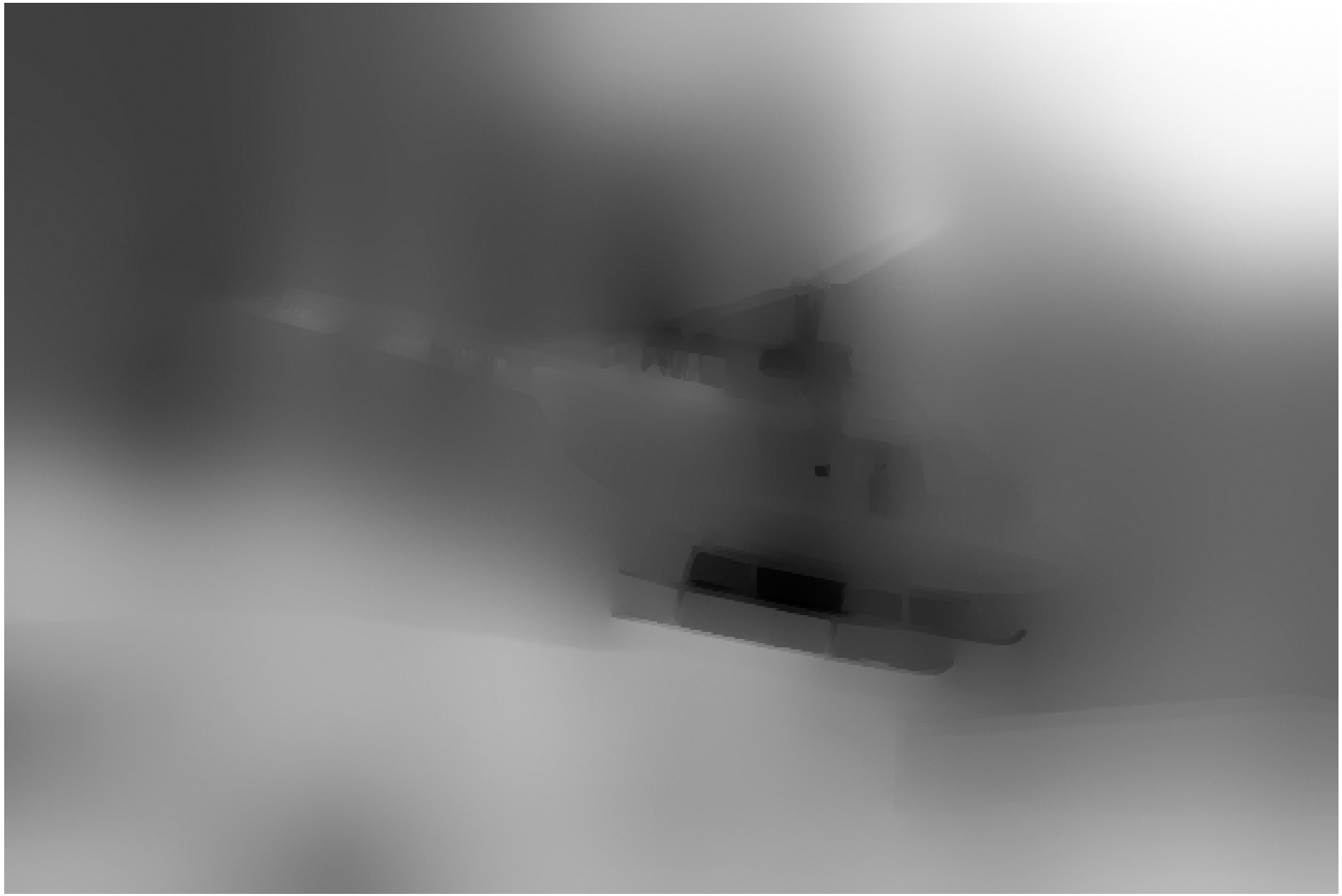
Input

Zhou *et al.*[3]

Shi *et al.* [4]

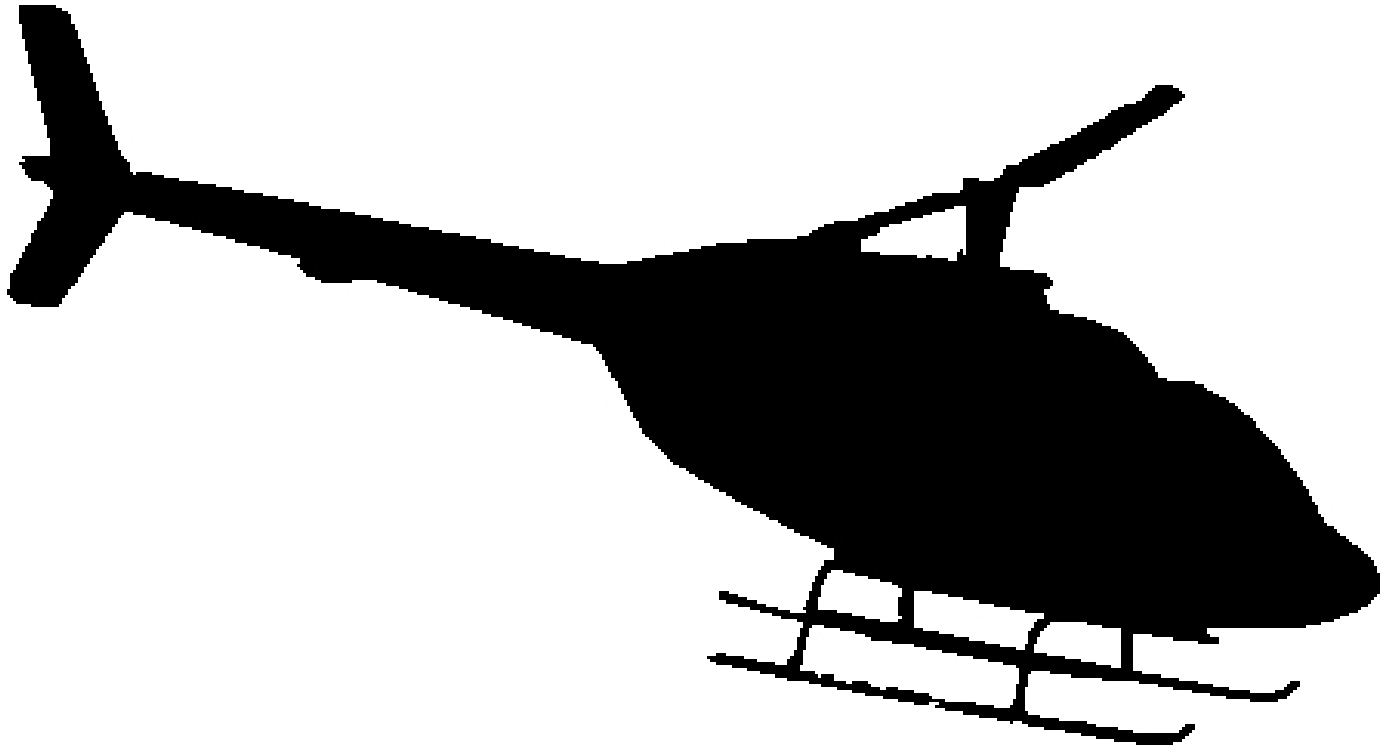


Park *et al.* [5]



Karaali *et al.* [6]

Ours



GT (Binary blur map)

Figure 8: Defocus blur magnification using defocus map estimated by $DMENet_{BDCS}$.

Input

Blur magnification result

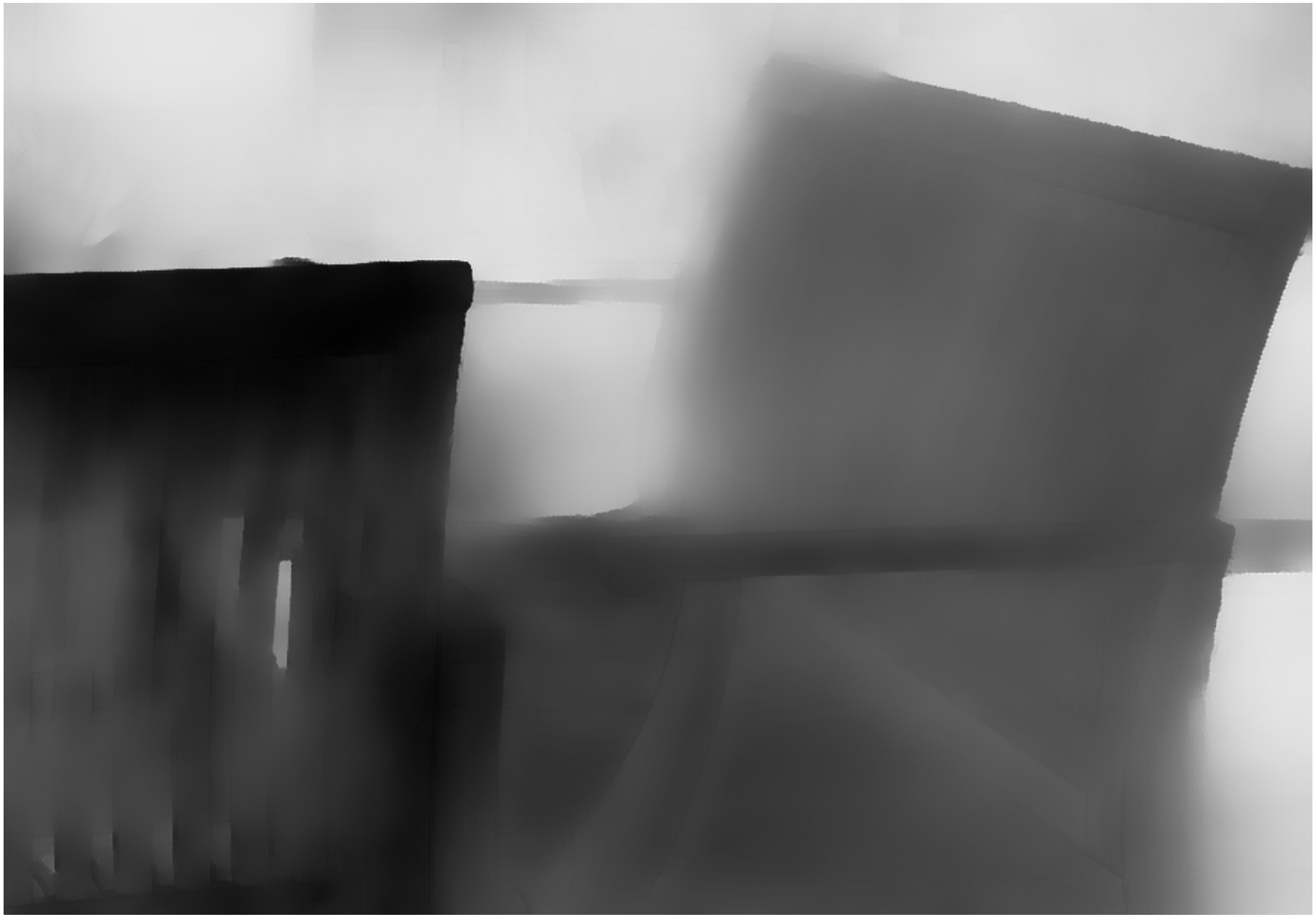
Figure 9: Deblurring using defocus map estimated by $DMENet_{BDCS}$.

Input

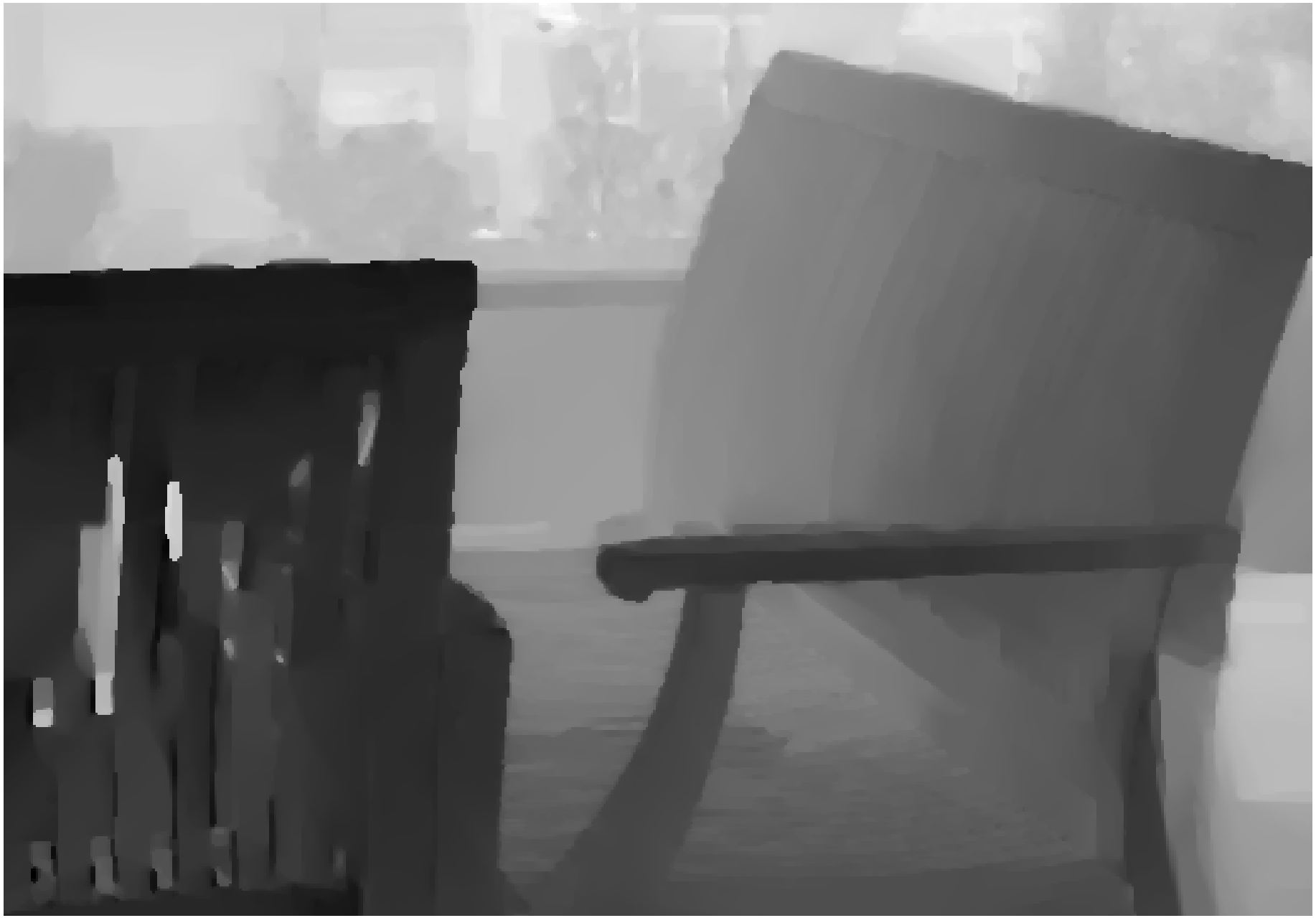
Deblurring result

Figure 9: Depth from defocus map estimated by $DMENet_{BDCS}$.

Input



Depth estimation result

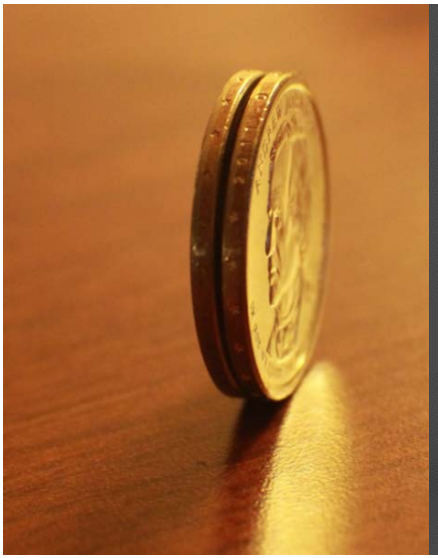


GT

More qualitative results on CUHK dataset [1]

* We could not visually compare results with Andrès *et al.* [2] and Zhang *et al.* [7], whose implementations have not been publicized yet.

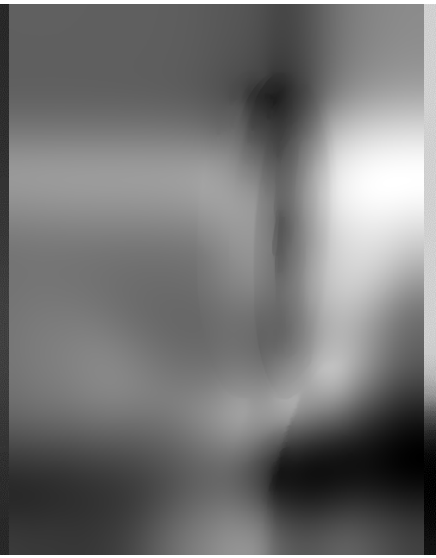
Input | Zhou *et al.*[3] | Shi *et al.* [4] | Park *et al.* [5] | Karaali *et al.* [6] | Ours


Input


Zhou *et al.*[3]

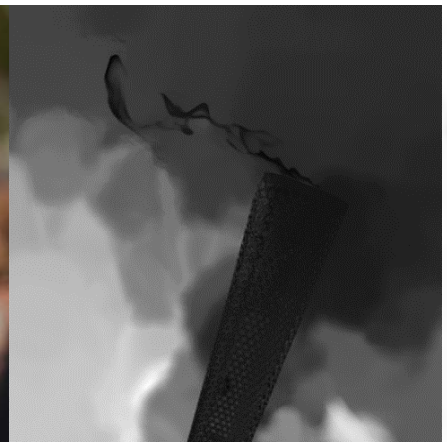

Shi *et al.* [4]


Park *et al.* [5]

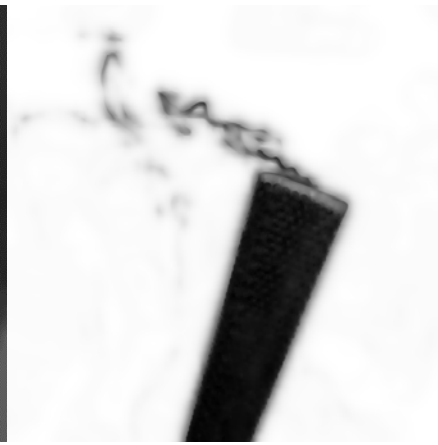

Karaali *et al.* [6]


Ours

Input



Zhou *et al.*[3]



Shi *et al.* [4]

Park *et al.* [5]

Karaali *et al.* [6]

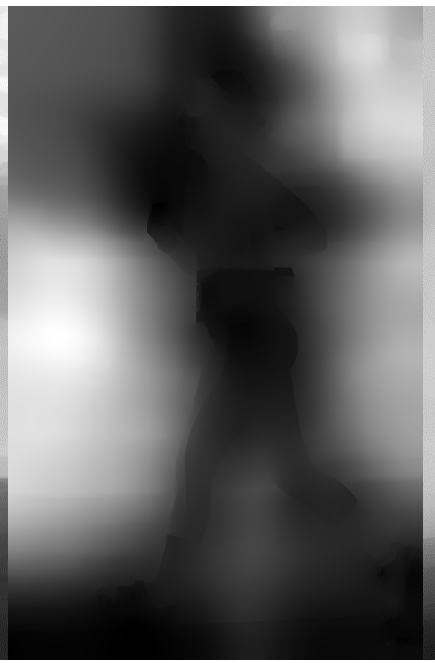
Ours

Input

Zhou *et al.*[3]

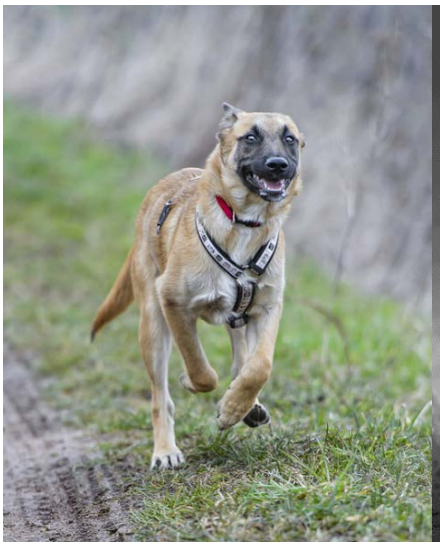
Shi *et al.* [4]

Park *et al.* [5]



Karaali *et al.* [6]

Ours



Input

Zhou *et al.*[3]

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Park *et al.* [5]

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Ours

Input

Zhou *et al.*[3]

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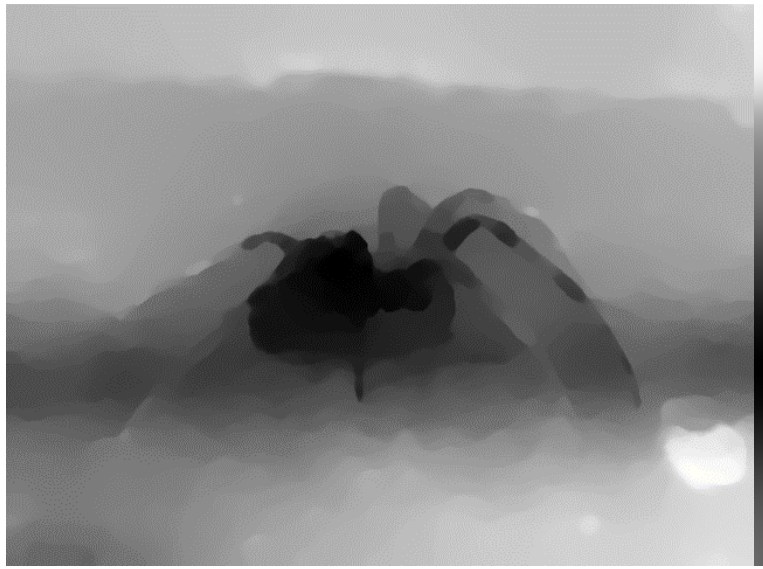
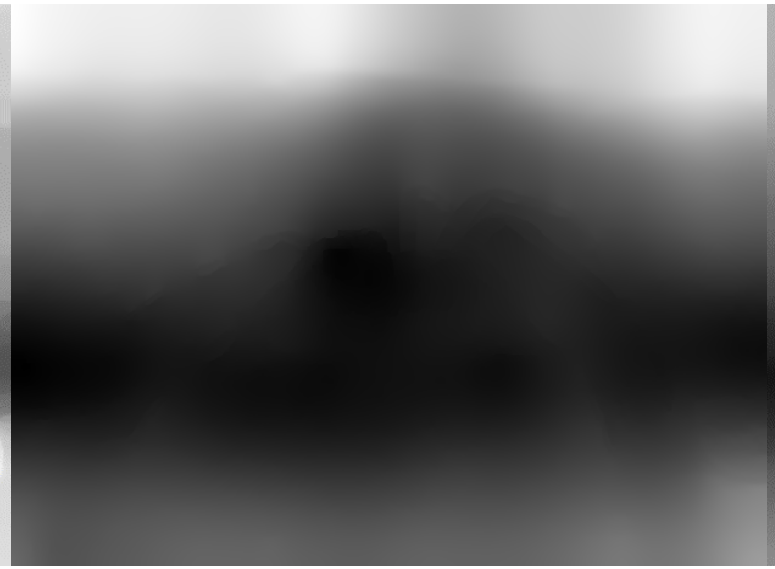


Park *et al.* [5]

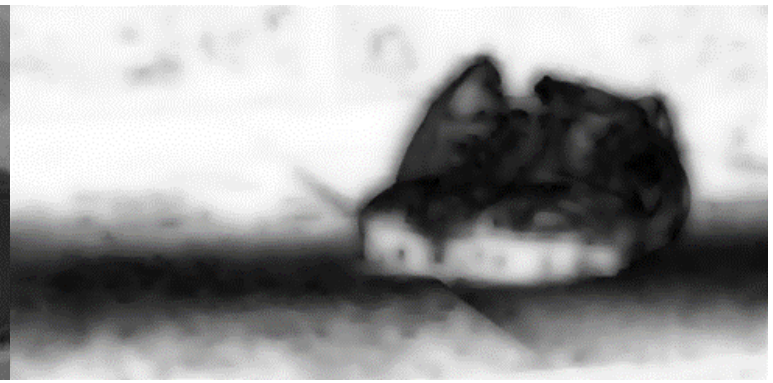


Karaali *et al.* [6]

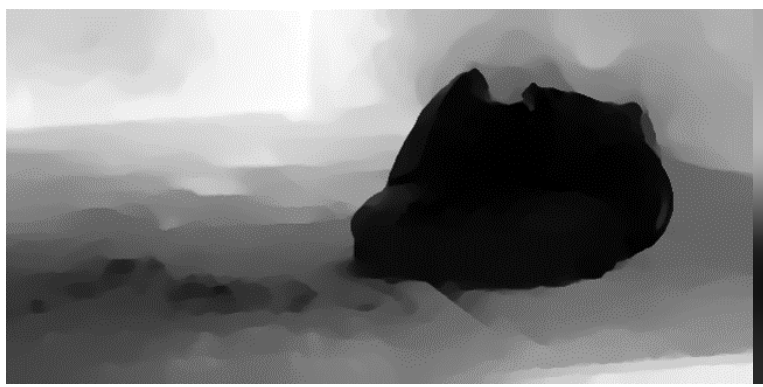
Ours

Input

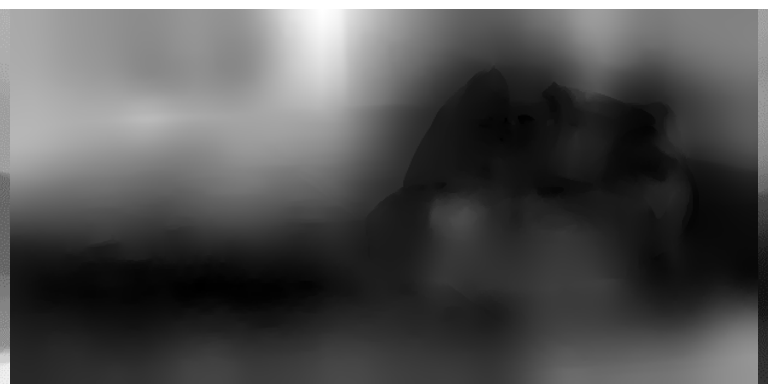
Zhou *et al.*[3]



Shi *et al.* [4]



Park *et al.* [5]



Karaali *et al.* [6]

Ours

Input

Zhou *et al.*[3]

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Karaali *et al.* [6]

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Zhou *et al.*[3]

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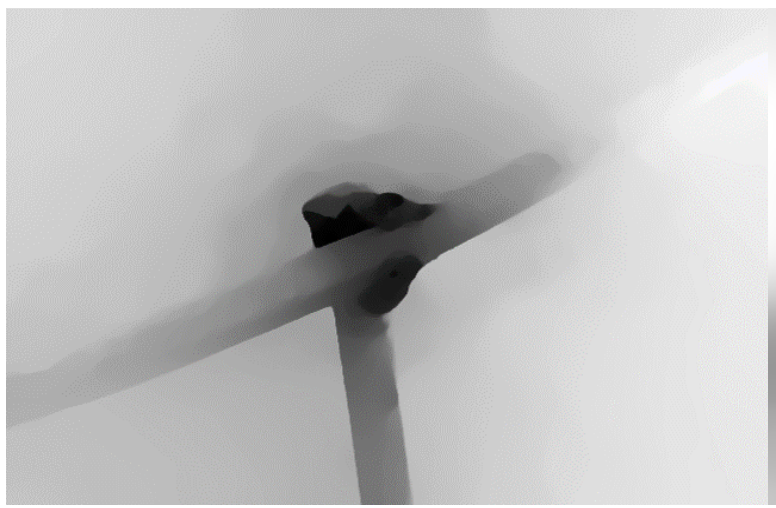
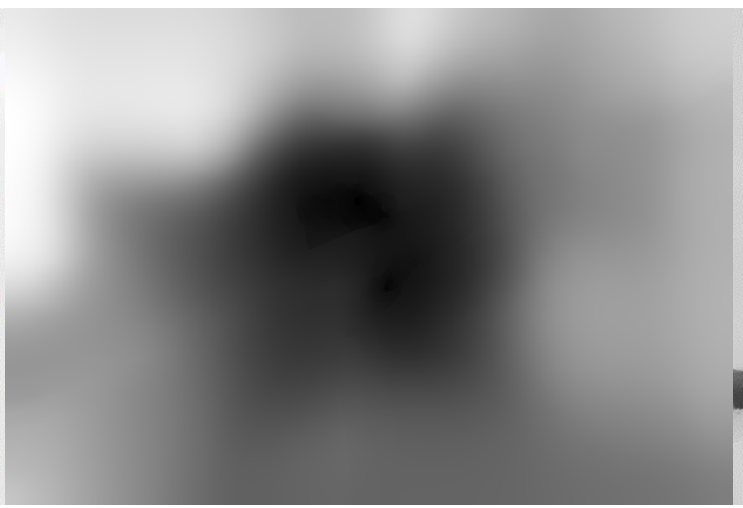


Park *et al.* [5]



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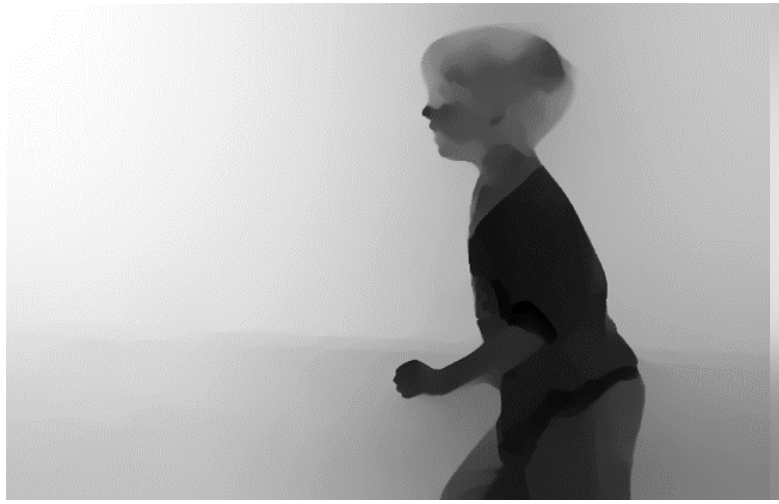

Park *et al.* [5]

Karaali *et al.* [6]

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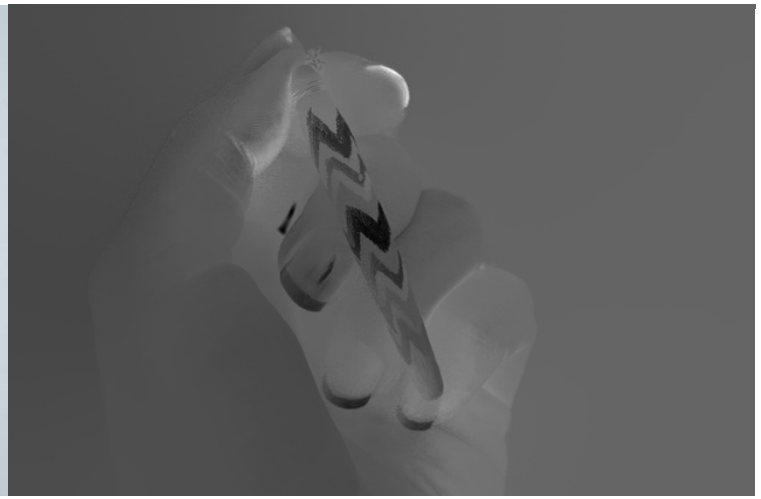
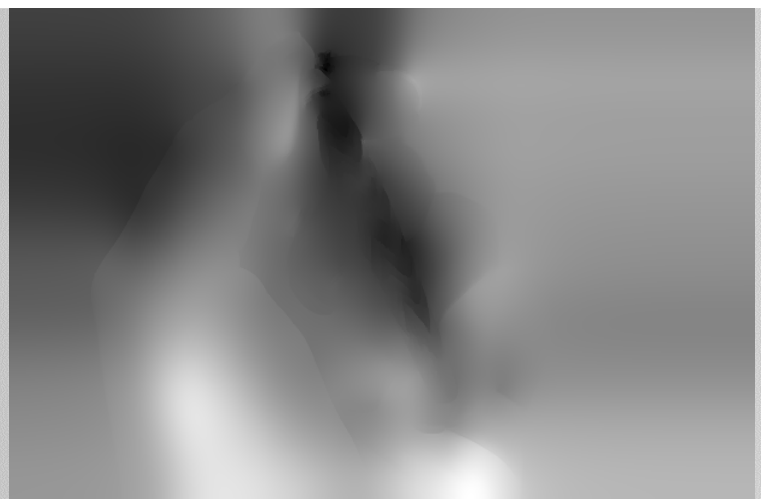


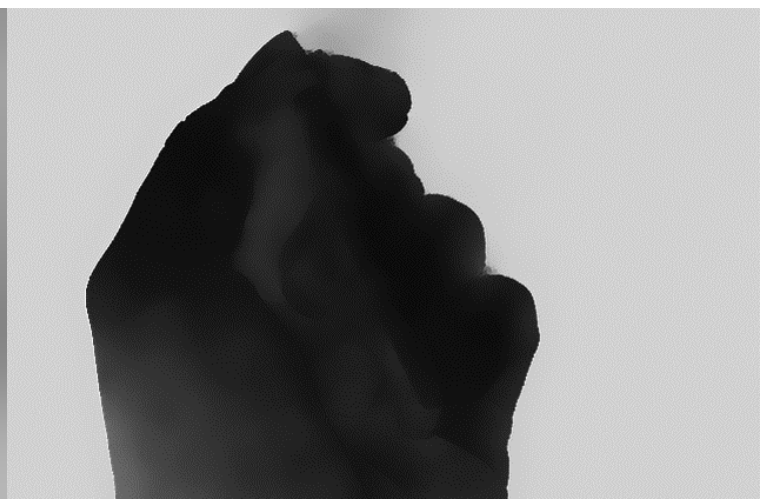
Zhou *et al.*[3]

Shi *et al.* [4]

Park *et al.* [5]



Karaali *et al.* [6]



Ours

Input

Zhou *et al.*[3]

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Park *et al.* [5]

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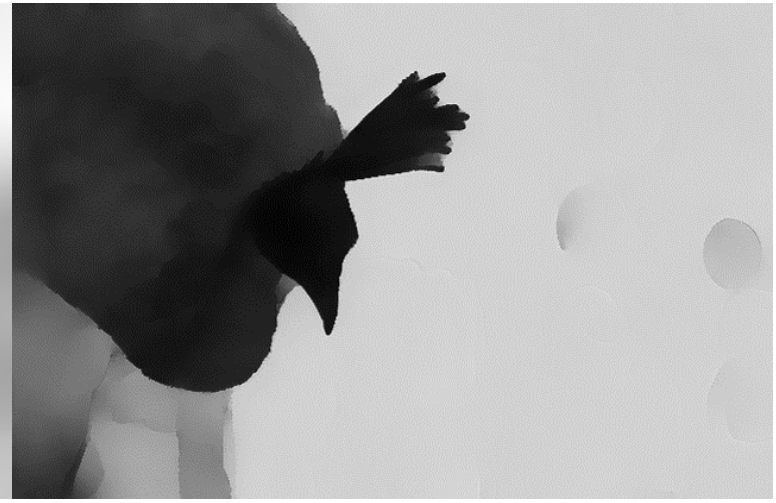
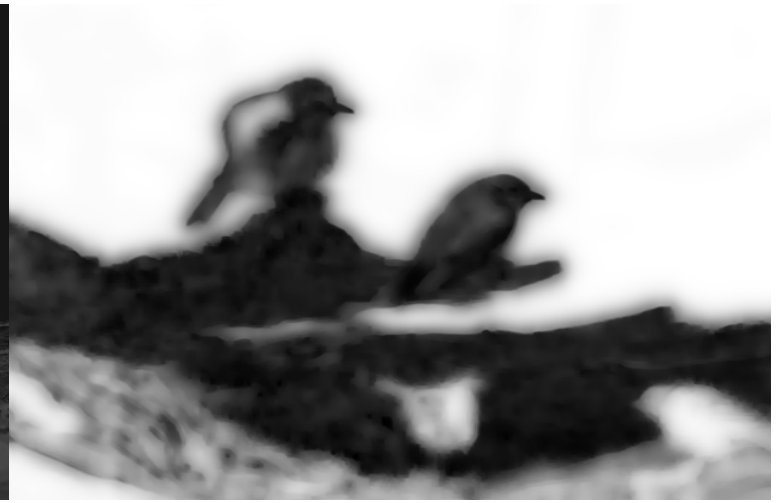


Ours

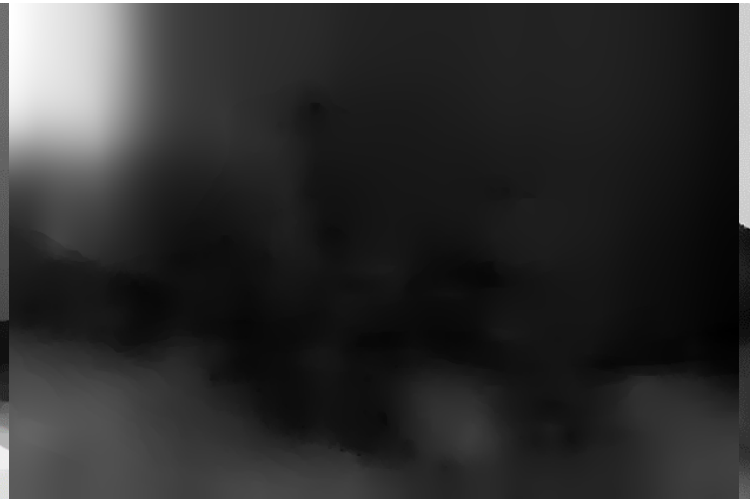
Input

Zhou *et al.*[3]



Shi *et al.* [4]

Park *et al.* [5]



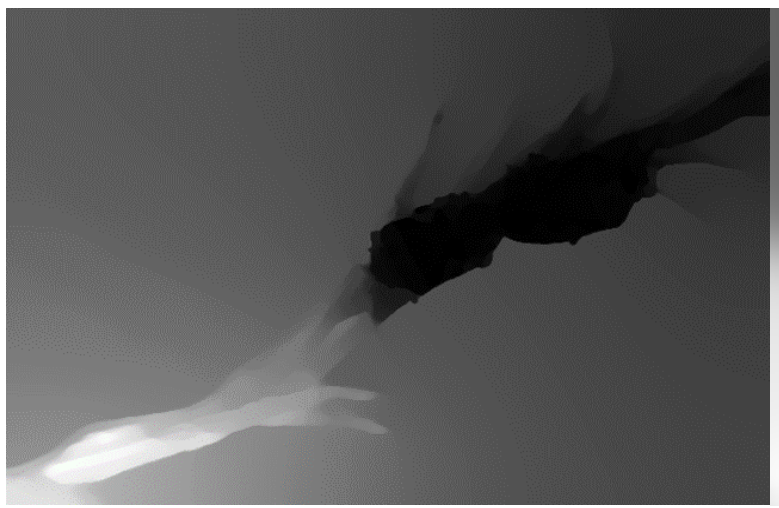
Karaali *et al.* [6]

Ours

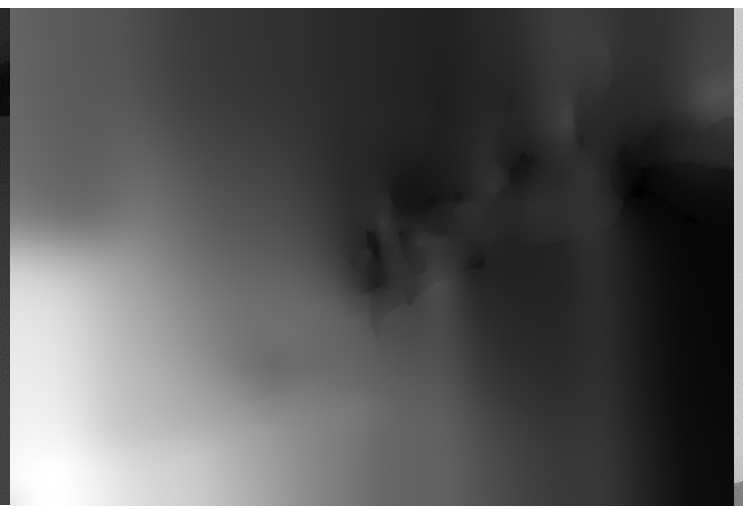
Input

Zhou *et al.*[3]

Shi *et al.* [4]



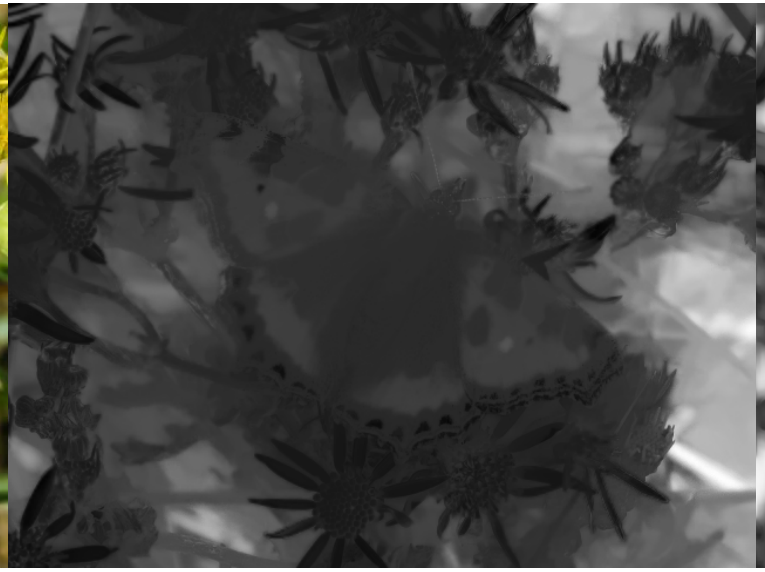
Park *et al.* [5]



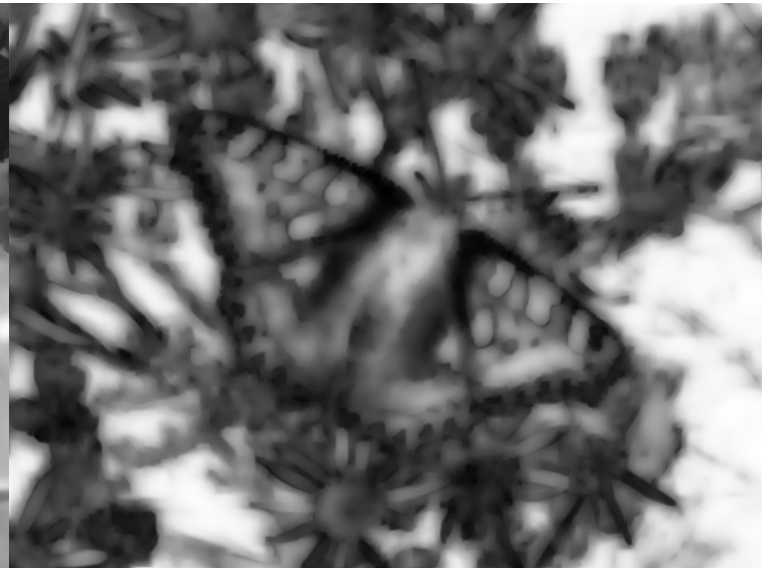
Karaali *et al.* [6]

Ours

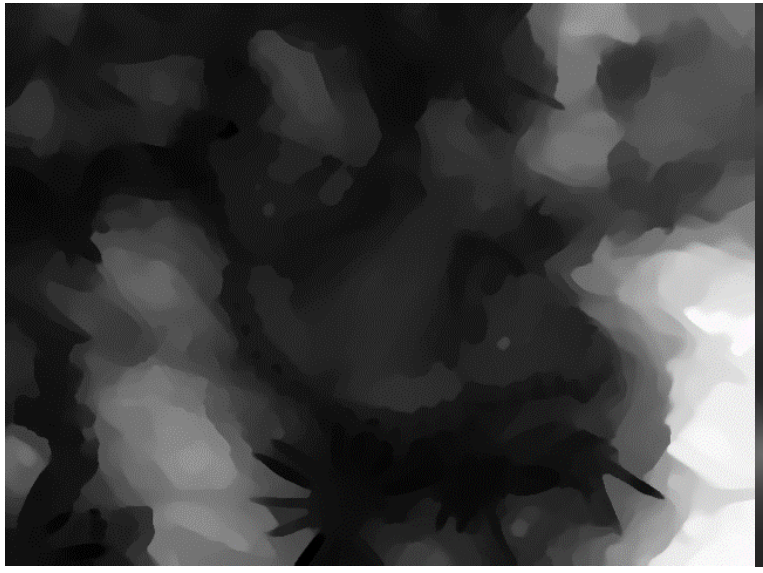
Input



Zhou *et al.*[3]

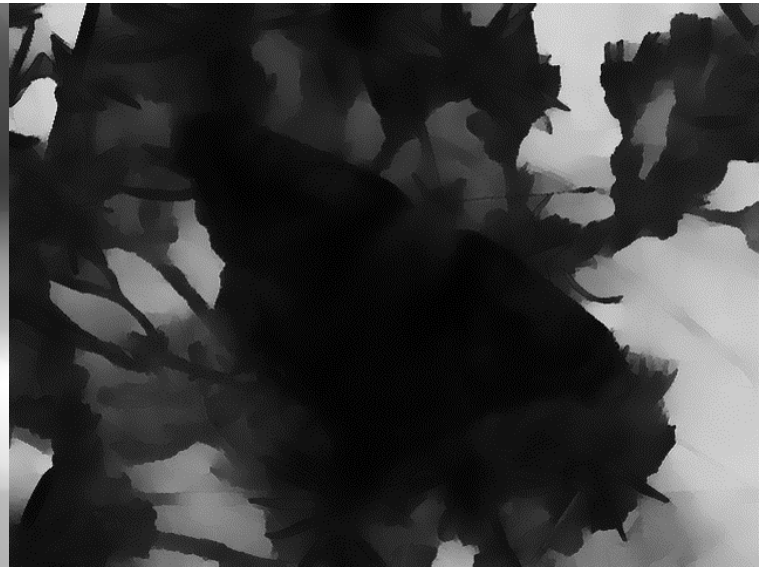


Shi *et al.* [4]



Park *et al.* [5]

Karaali *et al.* [6]

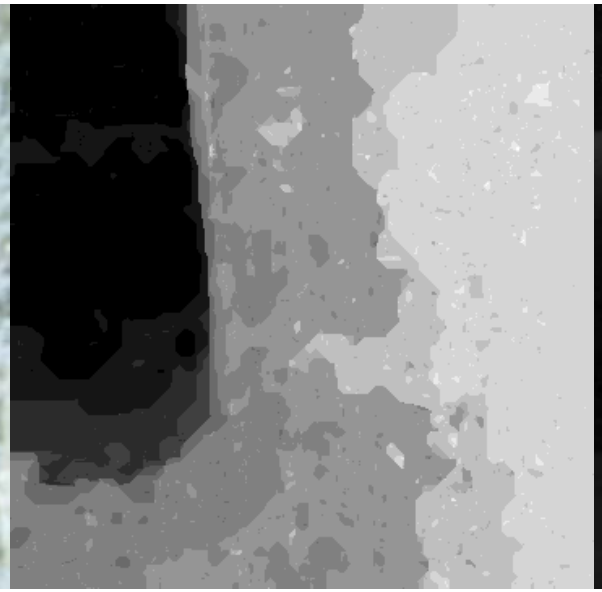


Ours

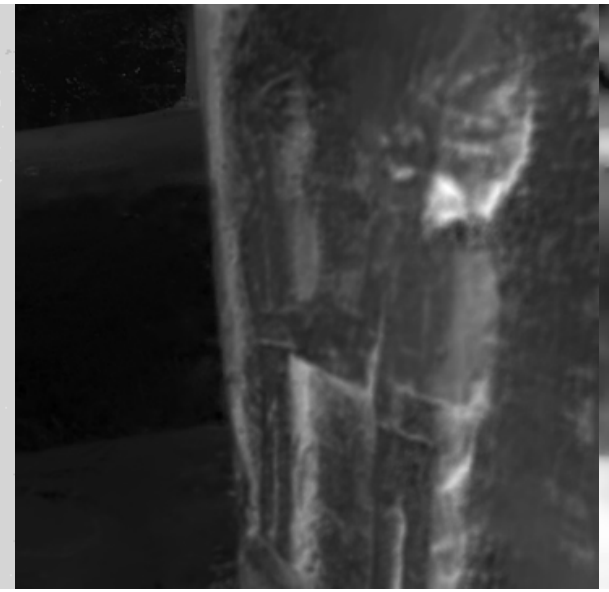
Qualitative results on RTF dataset [2]

* We could not visually compare results with Zhang *et al.* [7], whose implementation has not been publicized yet.

Input

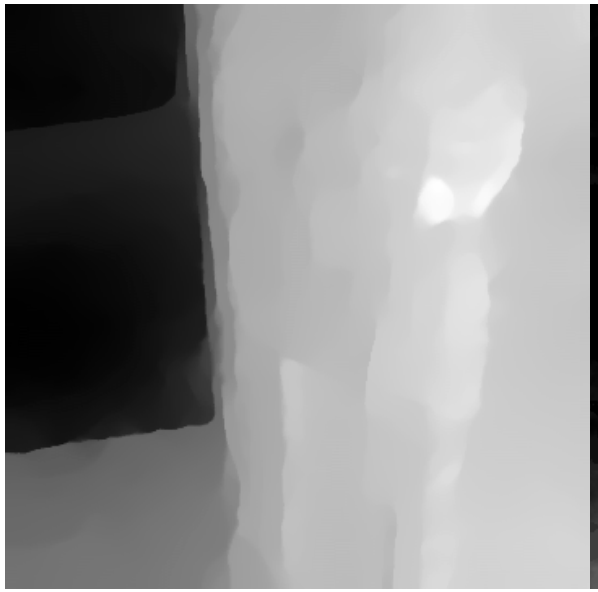


GT

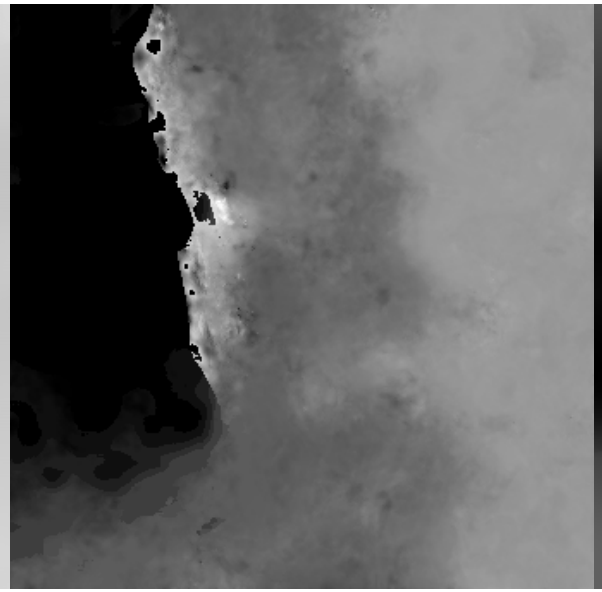


Zhou *et al.*[3]

Shi *et al.* [4]

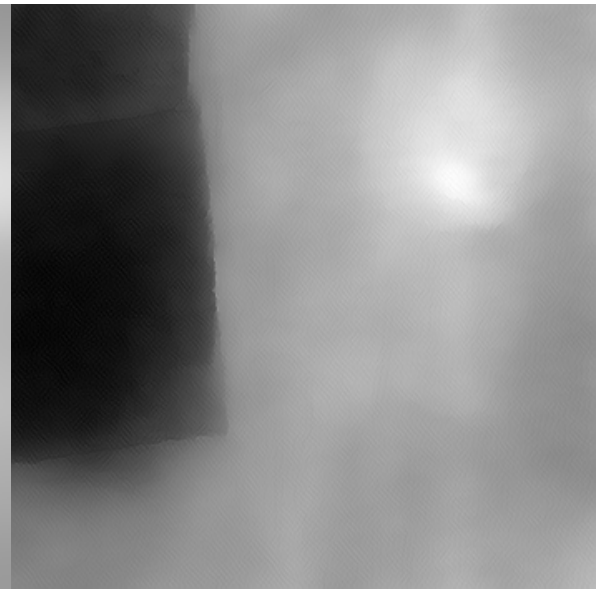


Park *et al.* [5]



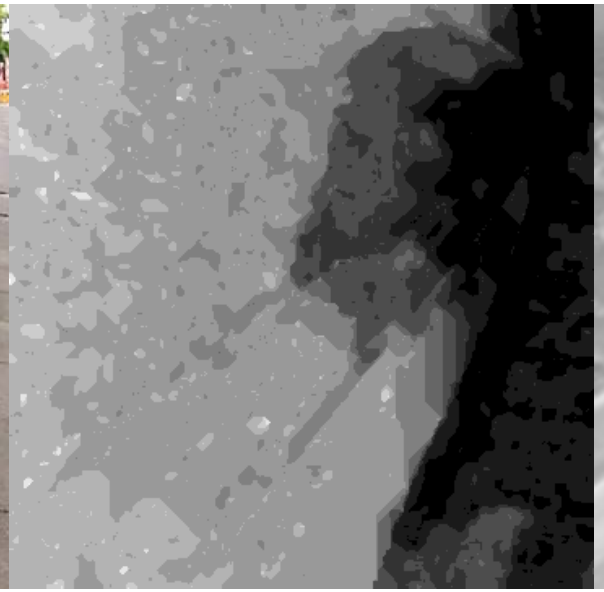
Andrès *et al.* [2]

Karaali *et al.* [6]

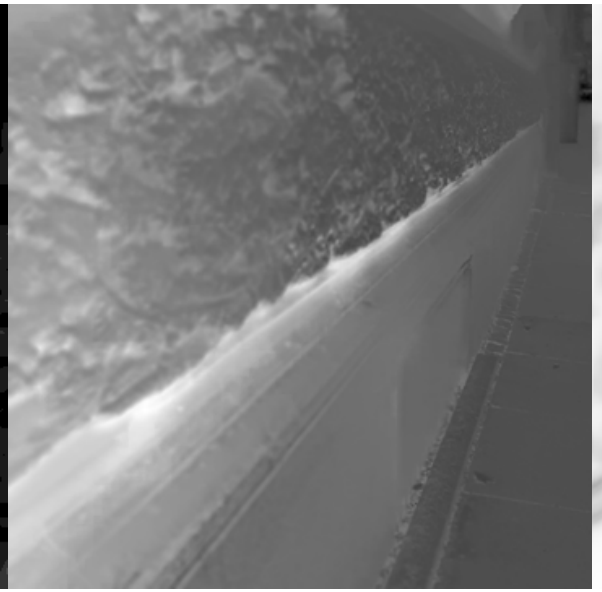


Ours

Input



GT



Zhou *et al.*[3]

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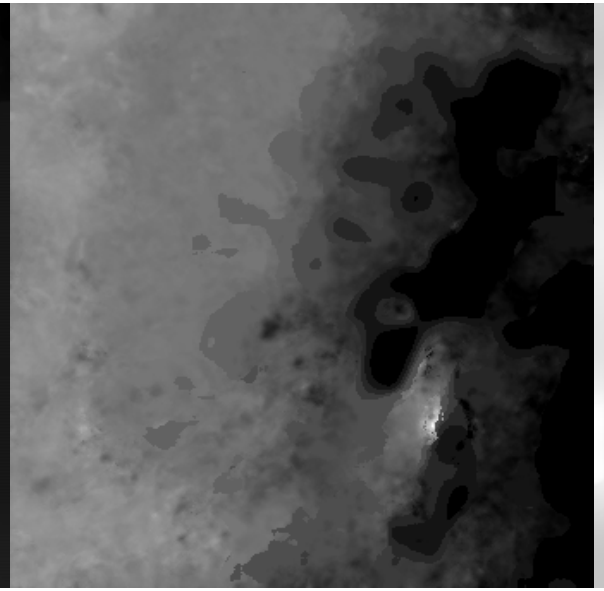
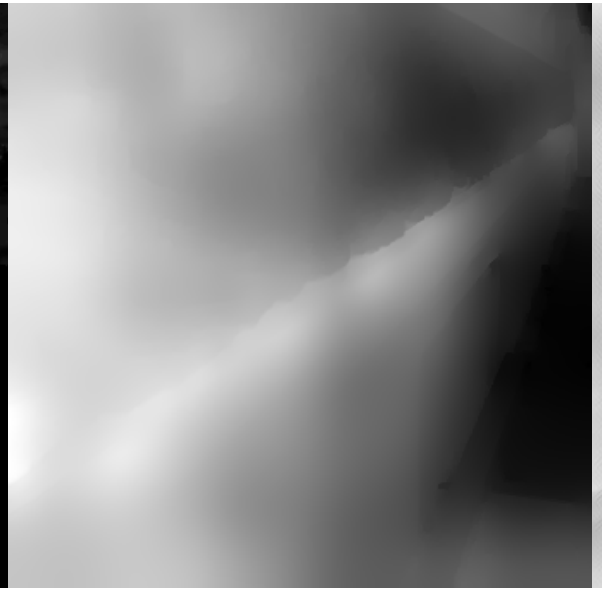


Andrès *et al.* [2]



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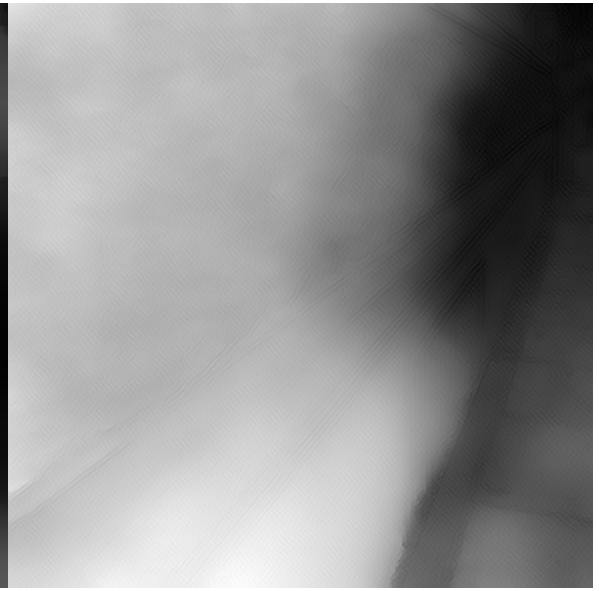
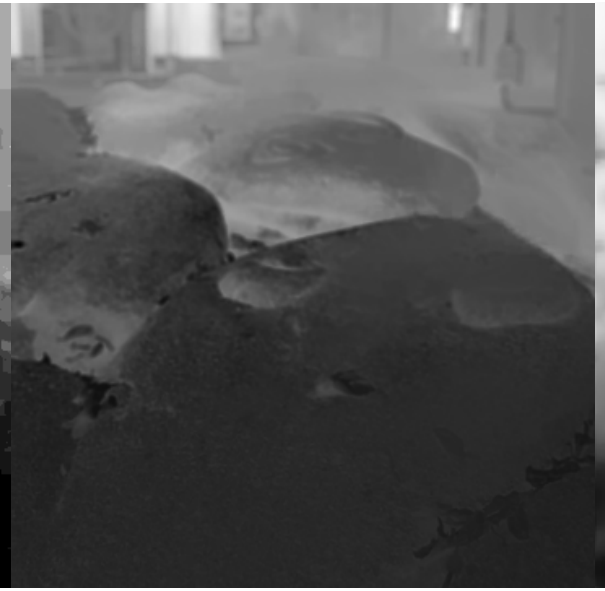


Ours

Input

GT



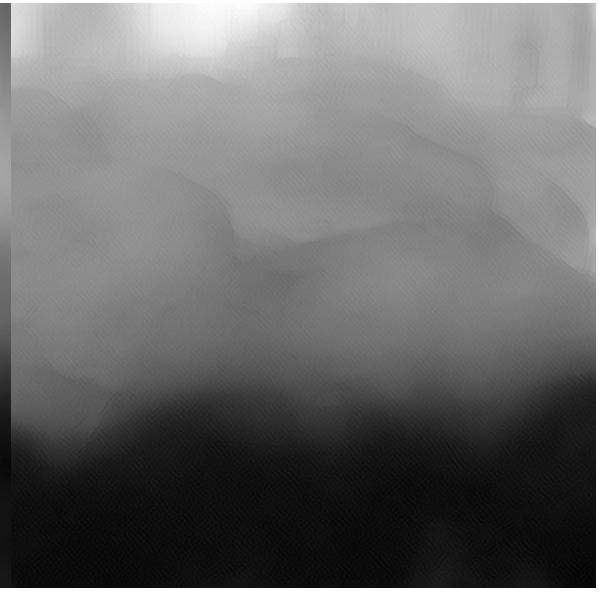
Zhou *et al.*[3]

Shi *et al.* [4]

Park *et al.* [5]

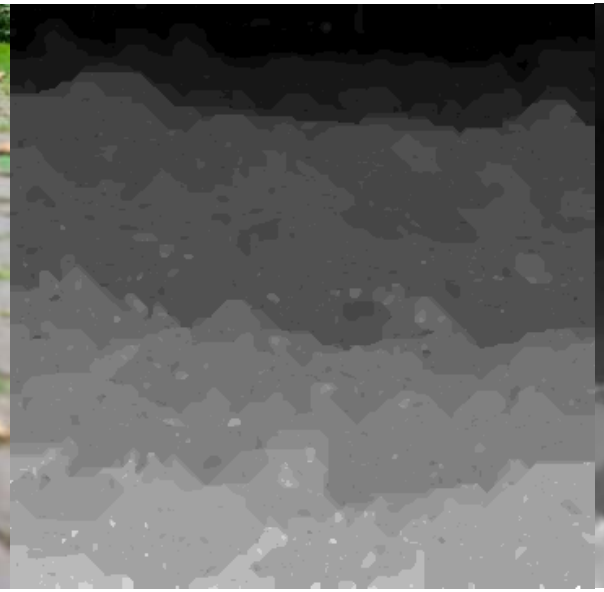
Andrès *et al.* [2]

Karaali *et al.* [6]



Ours

Input



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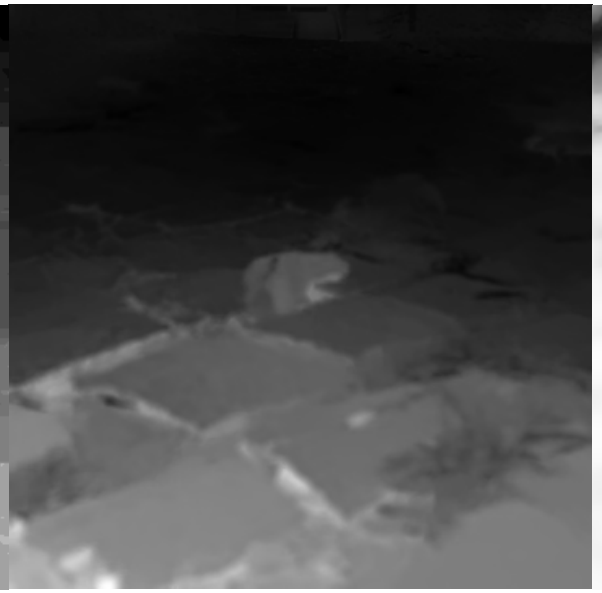

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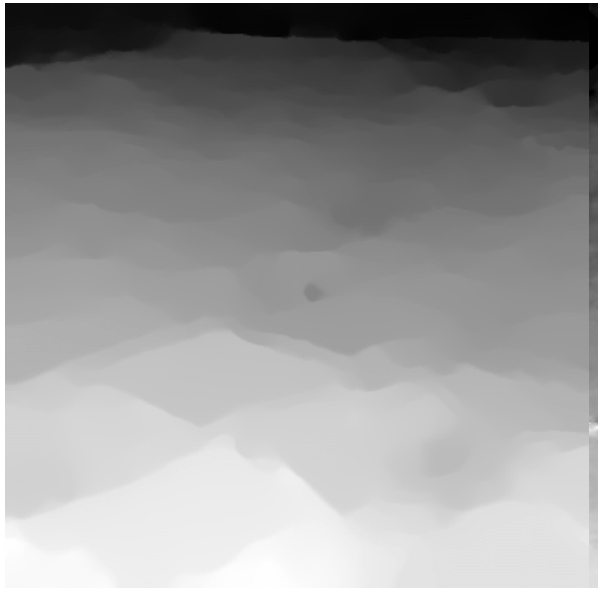
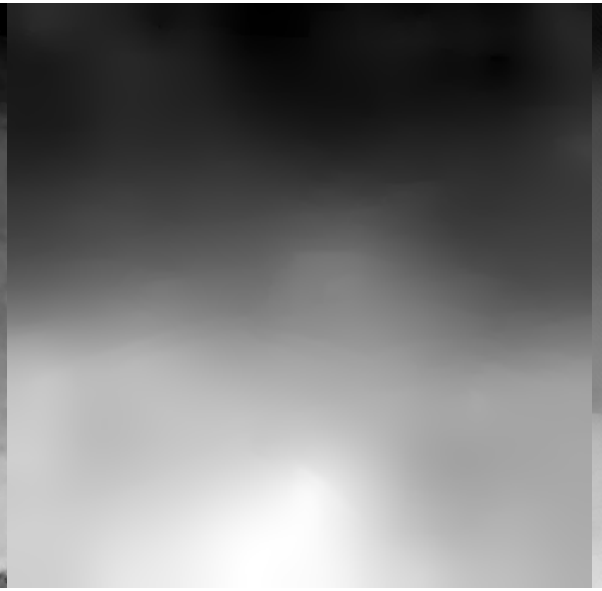
Shi *et al.* [4]



Park *et al.* [5]

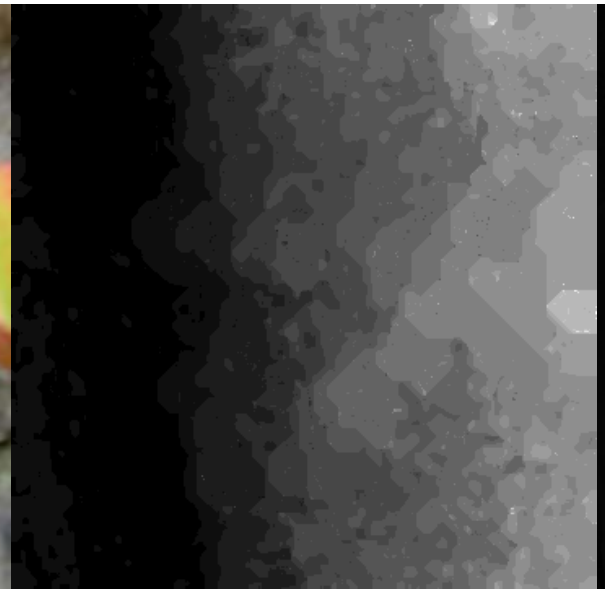
Andrès *et al.* [2]



Karaali *et al.* [6]

Ours

Input



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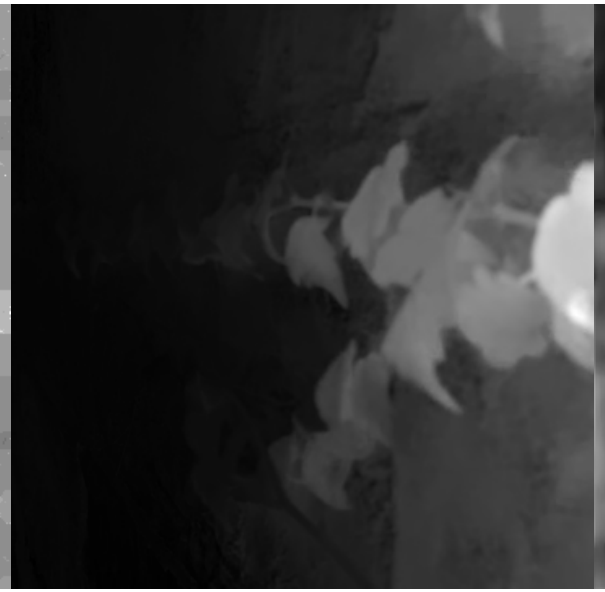

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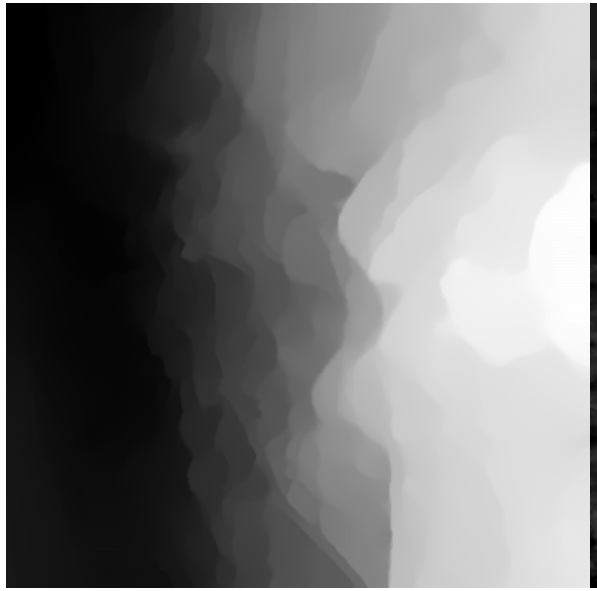
Shi *et al.* [4]



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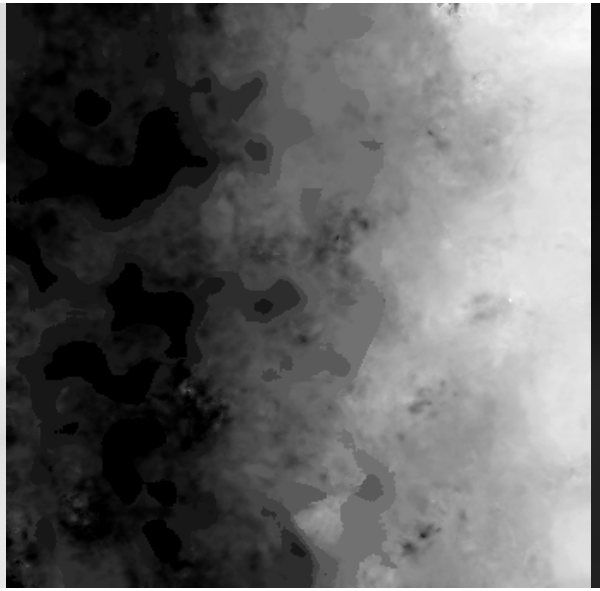

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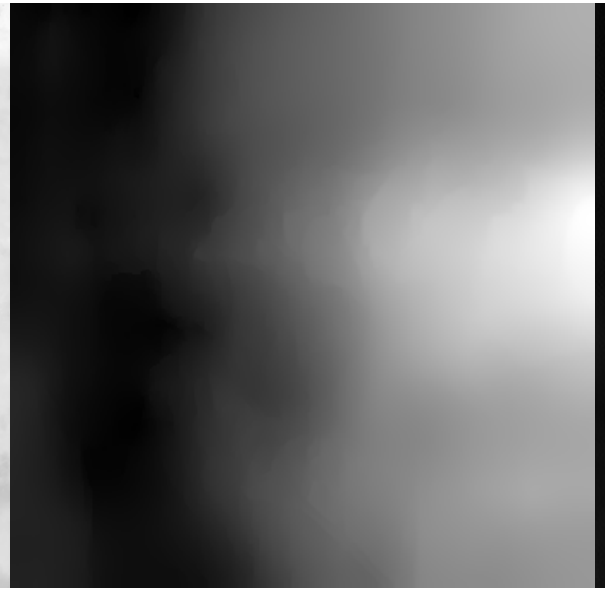

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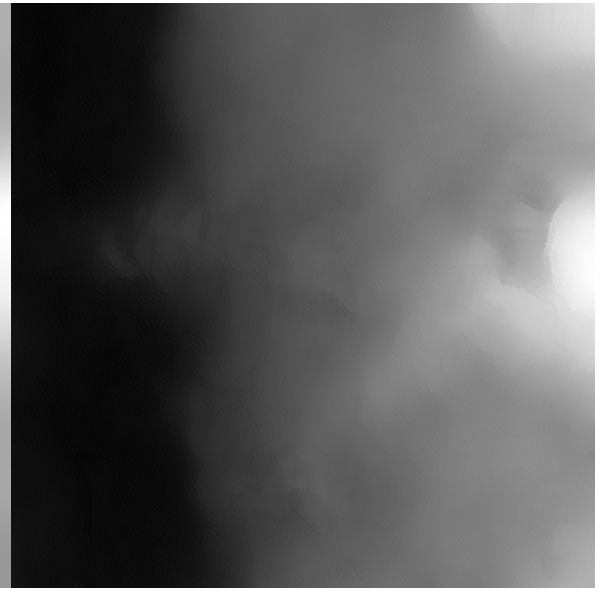

Ours

References

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