

Supplementary for *DeFusionNET: Defocus Blur Detection via Recurrently Fusing and Refining Multi-scale Deep Features*

Chang Tang¹, Xinzhong Zhu², Xinwang Liu³, Lizhe Wang¹, Albert Zomaya⁴

¹School of Computer Science, China University of Geosciences, Wuhan, China

²College of Mathematics, Physics and Information Engineering, Zhejiang Normal University, Jinhua, China

³School of Computer Science, National University of Defense Technology, Changsha, China

⁴School of Information Technologies, University of Sydney, NSW, Australia

{tangchang@cug.edu.cn, zxz@zjnu.edu.cn, xinwangliu@nudt.edu.cn, Lizhe.Wang@gmail.com, albert.zomaya@sydney.edu.au}

1. Ablation Analysis Using Precision-recall Curves

Ablation analysis using precision-recall curves is shown in Figure 1.

2. More Visual Comparison Results

More visual comparison results can be found in Figure 2.

3. Results at Different Time Steps

4. F-measure and MAE Scores of on Two Datasets with Different m

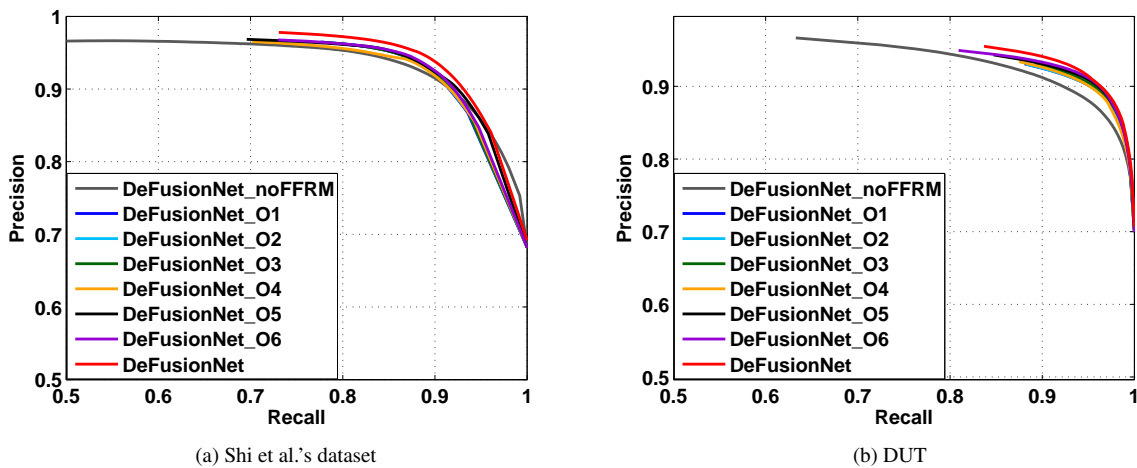


Figure 1. Ablation analysis using precision-recall curves.

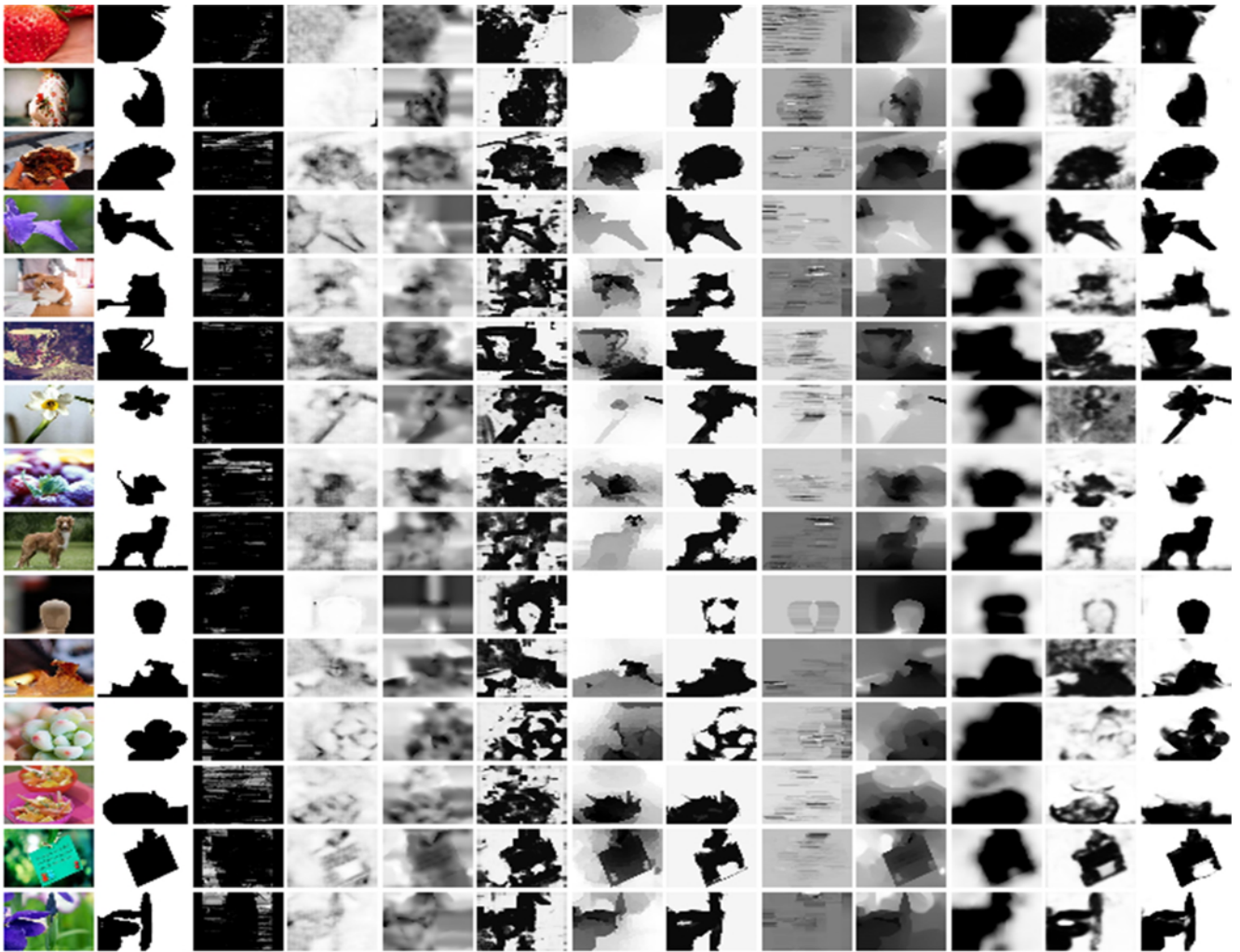


Figure 2. Visual comparison of detected defocus blur maps generated from different methods. The results demonstrate that our method consistently outperforms other approaches, and produces defocus blur maps more close to the ground truth.

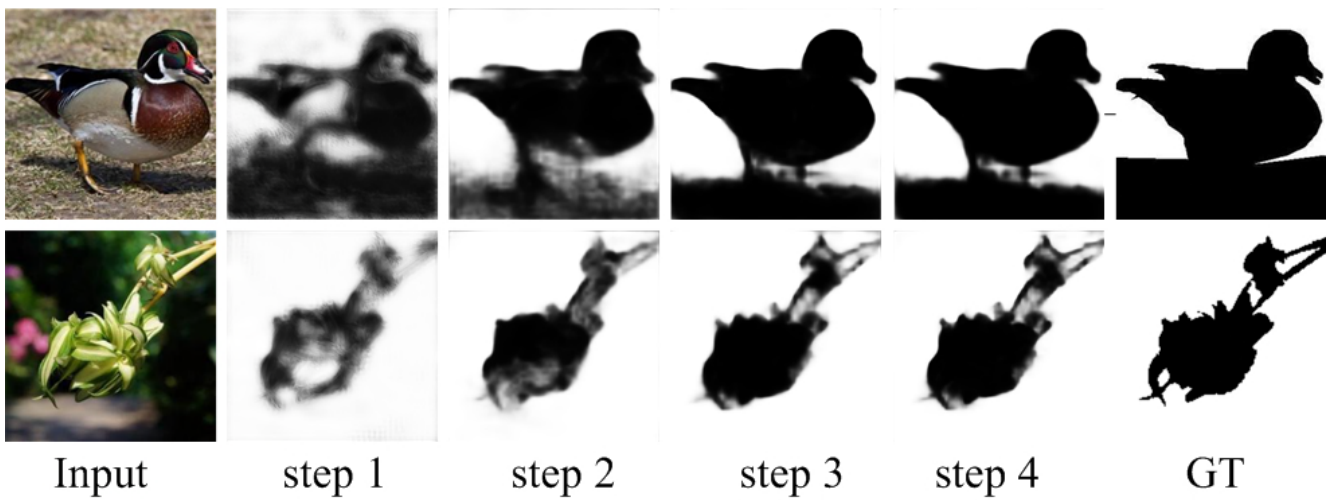


Figure 3. Results at different time steps.

Table 1. F-measure and MAE scores of on two datasets with different m

m		1	2	3	4	5	6
Shi et al.'s dataset	F-Measure	0.894	0.899	0.917	0.911	0.905	0.896
	MAE	0.122	0.119	0.116	0.118	0.125	0.131
DUT	F-Measure	0.898	0.914	0.922	0.919	0.903	0.896
	MAE	0.175	0.158	0.115	0.137	0.141	0.152