

# Feret Dataset

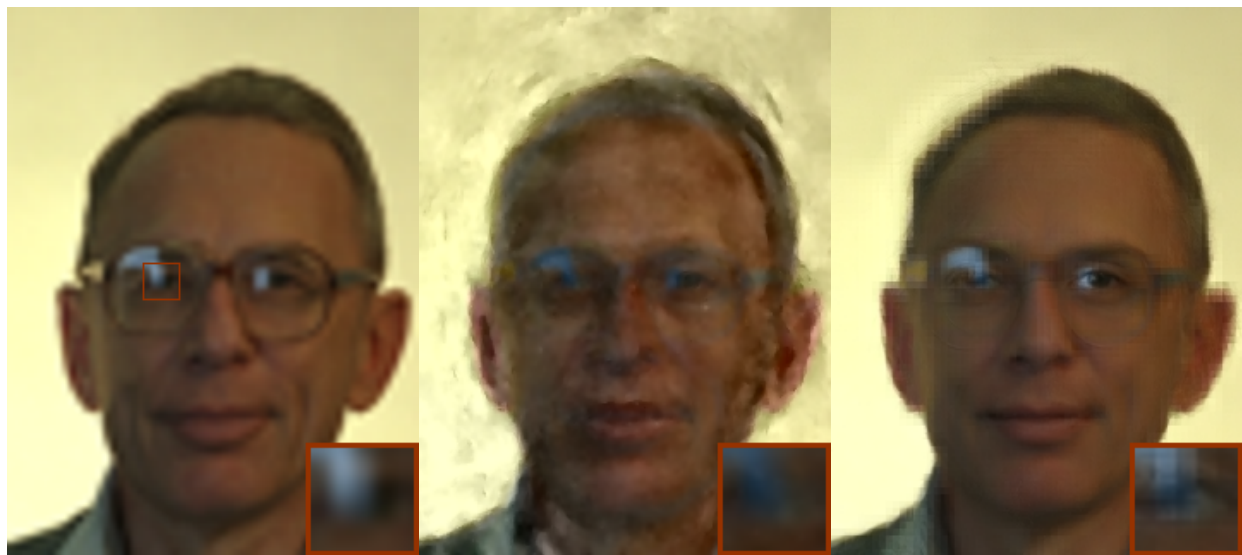
## Evaluations

TABLE I: Feret Dataset

	Bicubic	Liu07 [24]	Ma10 [30]	Yang10 [46]	Yang13 [43]	Dong15 [4]	Gu15 [8]	Finetuned [4]	Proposed
PSNR	29.816	23.680	28.039	31.164	29.487	31.870	32.012	32.172	<b>33.756</b>
SSIM	0.844	0.681	0.796	0.856	0.792	0.864	0.866	0.867	<b>0.896</b>
FSIM	0.889	0.807	0.872	0.912	0.896	0.917	0.920	0.921	<b>0.933</b>
GMSD	0.084	0.178	0.108	0.060	0.075	0.051	0.050	0.046	<b>0.038</b>

Quantitative evaluations on Feret dataset.

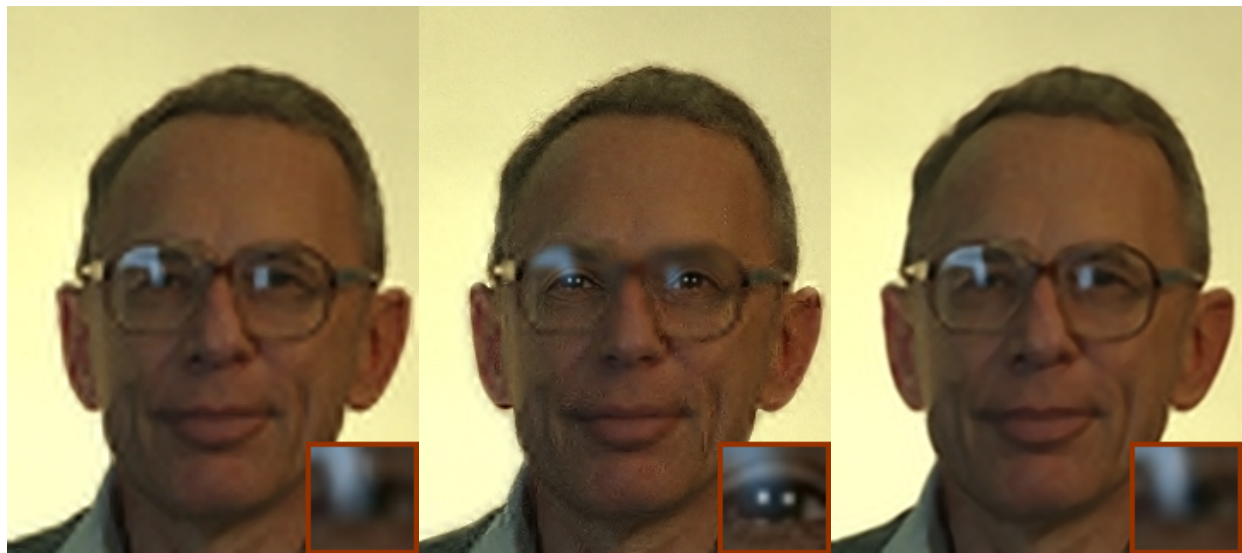
In this file we show numerical and visual evaluations on Feret dataset. We involve Gu15 [8] for comparison which is the most recent generic image SR method. The numerical evaluation is shown in Table I and visual evaluation is shown from Fig. 1 to Fig. 5.



(a) Bicubic  
PSNR / SSIM  
FSIM / GMSD

(b) Liu07 [24]  
21.887 / 0.649  
0.776 / 0.213

(c) Ma10 [30]  
27.243 / 0.810  
0.858 / 0.132



(d) Yang10 [46]  
31.337 / 0.878  
0.905 / 0.067

(e) Yang13 [43]  
29.879 / 0.822  
0.894 / 0.085

(f) Gu15 [8]  
33.165 / 0.897  
0.922 / 0.043



(g) Finetuned [4]  
33.171 / 0.893  
0.922 / 0.049

(h) Ours  
34.427 / 0.922  
0.937 / 0.042

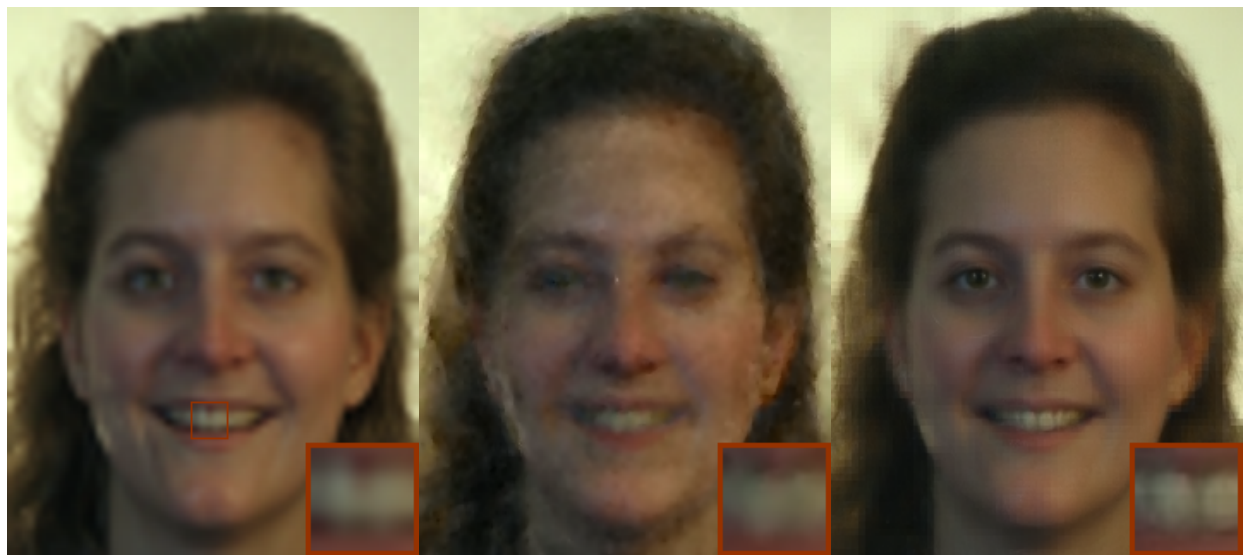
(i) Ground Truth  
 $+\infty$  / 1  
1 / 0

Fig. 1: Visual evaluation for  $4 \times$  upsampled face image.



Fig. 2: Visual evaluation for  $4 \times$  upsampled face image.





(a) Bicubic  
PSNR / SSIM  
FSIM / GMSD

(b) Liu07 [24]  
25.950 / 0.747  
0.843 / 0.137

(c) Ma10 [30]  
29.814 / 0.832  
0.891 / 0.097



(d) Yang10 [46]  
32.946 / 0.891  
0.927 / 0.050

(e) Yang13 [43]  
30.395 / 0.813  
0.904 / 0.066

(f) Gu15 [8]  
33.513 / 0.901  
0.933 / 0.045



(g) Finetuned [4]  
33.532 / 0.899  
0.932 / 0.047

(h) Ours  
**34.645 / 0.921**  
**0.944 / 0.041**

(i) Ground Truth  
 $+\infty$  / 1  
1 / 0

Fig. 3: Visual evaluation for  $4 \times$  upscaled face image.



(a) Bicubic  
PSNR / SSIM  
FSIM / GMSD

(b) Liu07 [24]  
26.822 / 0.725  
0.839 / 0.134

(c) Ma10 [30]  
29.938 / 0.794  
0.879 / 0.109



(d) Yang10 [46]  
32.719 / 0.863  
0.920 / 0.042

(e) Yang13 [43]  
30.127 / 0.773  
0.898 / 0.060

(f) Gu15 [8]  
32.909 / 0.871  
0.920 / 0.041



(g) Finetuned [4]  
32.914 / 0.869  
0.920 / 0.042

(h) Ours  
**34.556 / 0.904**  
**0.934 / 0.038**

(i) Ground Truth  
 $+\infty$  / 1  
1 / 0

Fig. 4: Visual evaluation for  $4 \times$  upsampled face image.





(a) Bicubic  
PSNR / SSIM  
FSIM / GMSD

(b) Liu07 [24]  
24.173 / 0.613  
0.792 / 0.161

(c) Ma10 [30]  
27.782 / 0.712  
0.849 / 0.120



(d) Yang10 [46]  
30.865 / 0.811  
0.900 / 0.054

(e) Yang13 [43]  
28.927 / 0.730  
0.880 / 0.075

(f) Gu15 [8]  
31.135 / 0.820  
0.901 / 0.048



(g) Finetuned [4]  
30.957 / 0.814  
0.898 / 0.054

(h) Ours  
33.243 / 0.881  
0.921 / 0.045

(i) Ground Truth  
 $+\infty$  / 1  
1 / 0

Fig. 5: Visual evaluation for  $4 \times$  upsampled face image.