Response to Reviewer’s Comments on paper 93

We thank the reviewers for their critical assessment of our work. In the following, we address their comments point by point.

A. Response to comments

A.1. Reviewer 1

Reply to review point 1.1:

We remove redundant and misleading information from the manuscript. We changed our title to "Lightweight Real-Time Image Super-Resolution Network for 4K images". We frame our paper to lightweight Image SR with 4K images.

Reply to review point 1.2:

We add extra qualitative results for X2 SISR in section 4.3. example of results is as follows:

![Figure 1. image 896 from DIV2K](image)

Reply to review point 1.3:

We combined tables 3 and 4 into one table for ease of comparison in section 4.3. And We added challenge benchmark reference and provided network RTSRN in tables.

Reply to review point 1.4:

We added lightweight SR transformer-based methods in related work. Other methods such as transformer-based SISR have been researched [2][5], showing significant performance improvements compared to other existing super-resolution techniques.” And we also add citations about other methods [1,4,6] in related work.

Reply to review point 1.5:

We calculate the additional metrics PSNR-Y and add them to Table 2. Also, We add the results of the method in the NTIRE2023 Real-Time Super-Resolution test set in table 1 and compare it with Bicubic and the top teams.

Reply to review point 1.6:

We added the results of the method in the NTIRE2023 Real-Time Super-Resolution test set in table 1 and included baseline methods.

Reply to review point 1.7:

We added the citation of GitHub repositories. The score is calculated by NTIRE2023 evaluation script [3].

Reply to review point 1.8:

We added extra qualitative results for X2 SISR in section 4.3. example of results is as follows:

![Figure 1. image 896 from DIV2K](image)

Table 1. Test phase results of NTIRE2023 Real-Time Super-Resolution track1 and track2

<table>
<thead>
<tr>
<th>Team</th>
<th>PSNR</th>
<th>SSIM</th>
<th>PSNR (Y)</th>
<th>Inference Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicubic</td>
<td>33.92</td>
<td>0.8049</td>
<td>36.66</td>
<td>0.45</td>
</tr>
<tr>
<td>Noisy_2 Tone Vision</td>
<td>35.02</td>
<td>0.8057</td>
<td>37.74</td>
<td>3.18</td>
</tr>
<tr>
<td>X2</td>
<td>34.68</td>
<td>0.8006</td>
<td>37.38</td>
<td>3.91</td>
</tr>
<tr>
<td>ALONG</td>
<td>34.71</td>
<td>0.8100</td>
<td>37.50</td>
<td>2.24</td>
</tr>
<tr>
<td>Team ON</td>
<td>34.62</td>
<td>0.8099</td>
<td>37.45</td>
<td>2.91</td>
</tr>
<tr>
<td>Proposed work</td>
<td>35.02</td>
<td>0.8048</td>
<td>37.76</td>
<td>11.19</td>
</tr>
</tbody>
</table>

We added the GitHub repository in the Abstract section. The code is available at https://github.com/Ganzooo/LRSRN.git.

Reply to review point 1.9:

We add citations for NTIRE Challenge 4K benchmark testset in section 4.3.

A.2. Reviewer 2

Reply to review point:

Thank you for your review. We will improve our model for future work to be more efficient and complete.

References