



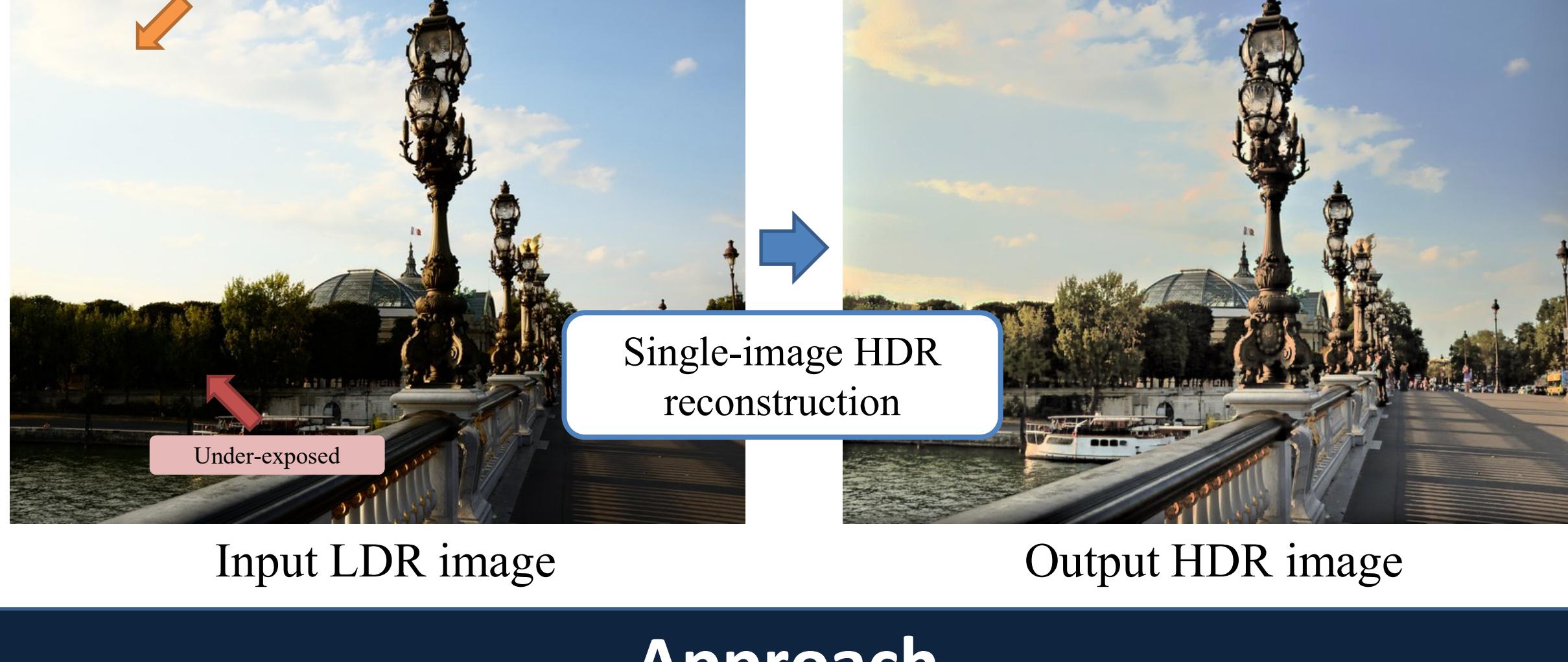
MEDIATEK



Single-Image HDR Reconstruction by Learning to Reverse the Camera Pipeline

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Introduction

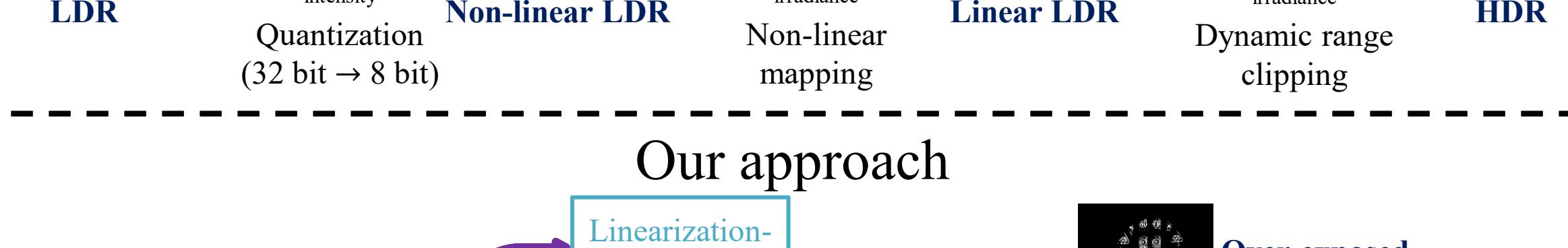


Input LDR image

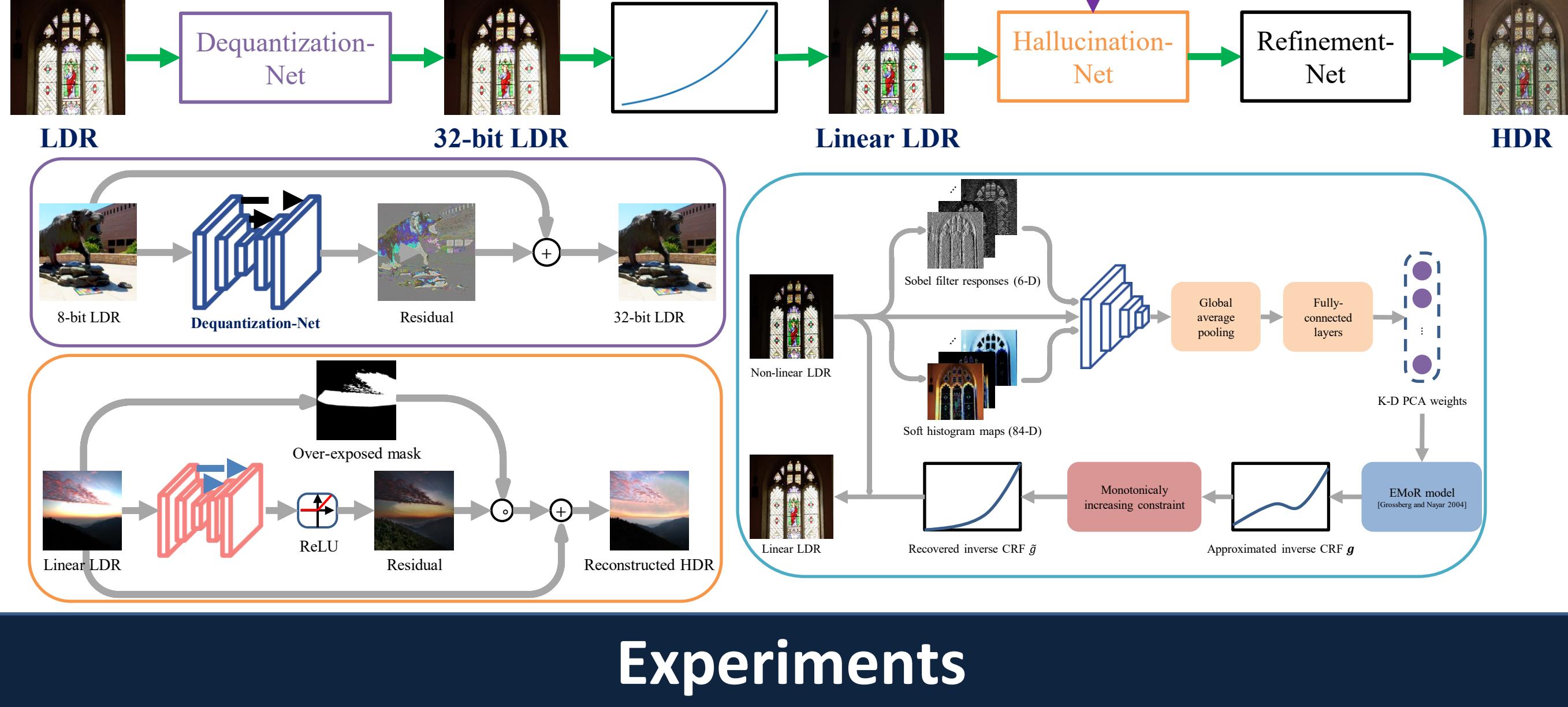
Output HDR image

Approach

LDR Image formation pipeline



Our approach

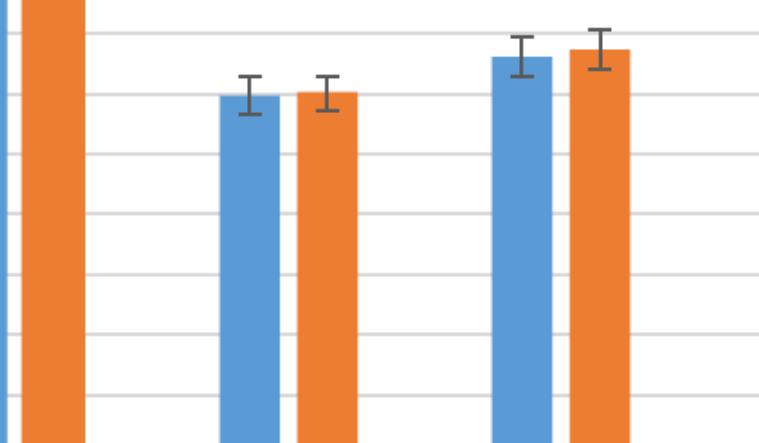
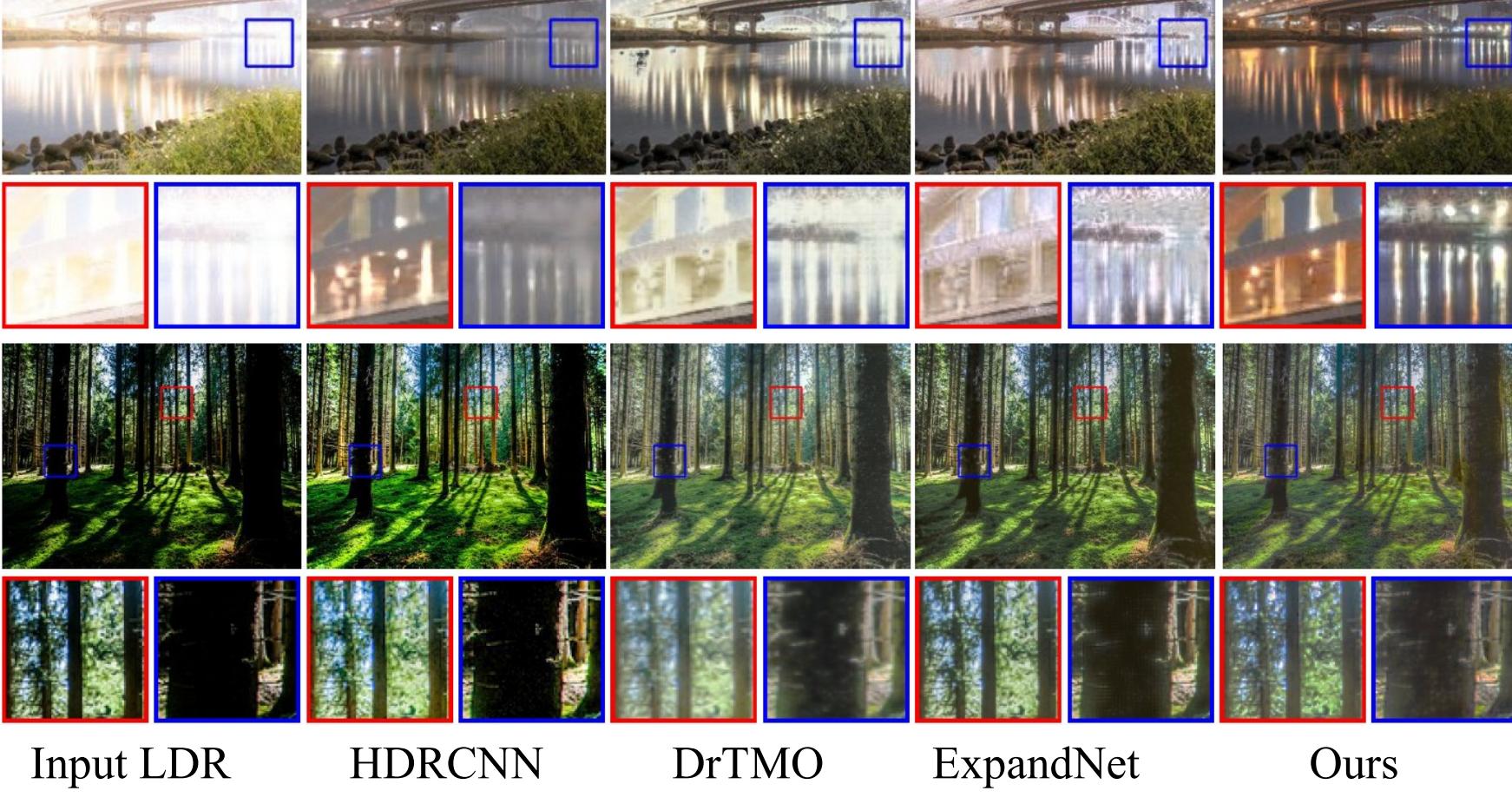


Experiments

Quantitative comparisons (HDR-VDP-2)

Method	HDR-Synth	HDR-Real	RAISE	HDR-Eye
HDRCNN	55.51 ± 6.64	51.38 ± 7.17	56.51 ± 4.33	51.08 ± 5.84
DrTMO	56.41 ± 7.20	50.77 ± 7.78	57.92 ± 3.69	51.26 ± 5.94
ExpandNet	53.55 ± 4.98	48.67 ± 6.46	54.62 ± 1.99	50.43 ± 5.49
Deep chain HDRI	-	-	-	49.80 ± 5.97
Deep recursive HDRI	-	-	-	48.85 ± 4.91
Ours	59.52 ± 6.02	53.16 ± 7.19	59.21 ± 3.68	53.16 ± 5.92

Qualitative comparisons



More results can be found in our project website!