Fast and Accurate Image Super-Resolution with Deep Laplacian Pyramid Networks

Wei-Sheng Lai, Jia-Bin Huang, Narendra Ahuja, and Ming-Hsuan Yang

5.3 Model parameters

We show the reconstruction performance versus the number of network parameters of CNN-based SR methods in Figure 15. By sharing parameters and using recursive layers, our MS-LapSRN has parameters about 73% less than the LapSRN [16], 66% less than the VDSR [11], 87% less than the DRCN [12], and 25% less than the DRRN [13]. While our model has a smaller footprint, we achieve the state-

Parameters Values are taken From This Paper

A Deep Journey into Super-resolution: A Survey

Saeed Anwar, Salman Khan, and Nick Barnes

Abstract—Deep convolutional networks based super-resolution is a fast-growing field with numerous practical applications. In this exposition, we extensively compare mora than 30 state-of-the-art super-resolution Convolutional Neural Networks (CNNs) over three classical and three recently introduced challenging datasets to benchmark single image super-resolution. We introduce a taxonomy for deep-learning based super-resolution networks that groups existing methods into nine categories including linear, residual,

$$73\% = 100 - \left(\frac{\text{MSLapSRN Parameters}}{\text{LapSRN Parameters}} * 100 \right)$$

$$73\% = 100 - \frac{222}{812} * 100 = 100 - 27.33 = 73\%$$

$$66\% = 100 - \left(\frac{\text{MSLapSRN Parameters}}{\text{VDSR Parameters}} * 100 \right)$$

$$66\% = 100 - \frac{222}{665} * 100 = 100 - 33.38 = 66\%$$

$$87\% = 100 - \left(\frac{\text{MSLapSRN Parameters}}{\text{DRCN Parameters}} * 100 \right)$$

$$87\% = 100 - \frac{222}{1775} * 100 = 100 - 27.33 = 87\%$$