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Learning Recurrent Residual Regressors for Single Image Super-Resolution

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Highlights

- We propose to learn multi-round residual regressors using K-SVD dictionary learning algorithm for the approximation of complicated mapping relationship between the LR and HR images.
- We develop a novel example regression-based SR algorithm based on a set of the learned multi-round residual regressors in a coarse-to-fine SR framework.
- Compared with previous one-pass regression models, the proposed example regression-based SR algorithm can produce competitive and promising SR quality in preserving sharper edges while maintaining finer details.

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