Abstract

Super resolution increases the resolution of the image. This paper proposes the two stage novel SR method. In the first stage, of the proposed method first jointly train two dictionaries for the high and low resolution image patches. Then apply a sparse representation for each low-resolution image patch, and correspondingly generate a high-resolution intermediate image by exploiting the high-resolution dictionary and low-resolution dictionary. In the second stage, of the proposed method a higher resolution image is obtained by fusing the intermediate high-resolution image sequence based on projection onto convex sets (POCS) method, increase image magnification while keeping good effectiveness. Experiment results show
the effectiveness of the proposed method and improved performance over other SR algorithms.

References

- Wei and Kai-Kuang Ma, "Contrast-Guided Image Interpolation", Transactions on image processing IEEE Vol. 22, no. 11, pg. no 4271-428, November 2013

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Keywords

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