Abstract

In this paper we propose a zoom based technique to super resolve static scene using observation captured at different camera zoom factor. We capture a static scene at different camera zoom and obtain super resolved image of entire scene at resolution of most zoom observation. Minimum absolute error criteria is used to model image features such as edges, corners etc. We utilize the fact that the local geometry of these features in the low resolution image is similar to their corresponding high resolution version. Missing high frequency details of
low resolution observation are learnt in the form of discrete cosine transform coefficient from high resolution training images in the database. The experiments are conducted on real world scene and results are compared with standard interpolation techniques.

References

Index Terms

Computer Science

Image Processing

Keywords

Learning Based Method  Discrete Cosine Transforms (dct)  Minimum Absolute Error Criteria And Super Resolution.