UW Center for Pattern Analysis and Machine Intelligence

Graduate Seminar Series

Perceptual Evaluation of Image Denoising Algorithms

Speaker: Kai Zeng
Date: 13 November, 2013
Time: 4:00 pm – 4:30 pm
Place: E5 -5047 Refreshments will be served

Abstract :

Denoising has been studied as a fundamental image processing problem for a long time. But the quality assessment (QA) of denoised images is not a trivial problem due to different types of artifact created by the employed denoising algorithms. This paper investigates this problem by conducting subjective experiment to create an image QA database, which was developed by collecting the subjects' opinion for the quality of 240 denoised images. The performance of existing QA methods is thus evaluated both statistically and analytically. The experimental results show that state-of-the-art QA models only moderately correlated with subjective opinions based on our observation.

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