Abstract

This paper proposes a discrete wavelet-based stereo matching technique. A discrete wavelet transform is first applied to a pair of stereo images to decorrelate the images into a number of approximations. Information in the basebands is less sensitive to shift variability of the wavelet transform. A self-adapting dissimilarity measure is employed to generate a disparity map of the stereo pairs. Results show that the proposed technique produces smoother disparity maps with less computation cost.
References


Index Terms

Computer Science
Image Processing
Keywords
Stereo Matching  Discrete Wavelet Transform  Disparity