

Low light photography suffers from blur and noise. In this paper, we propose a novel method to recover a dense estimate of spatially varying blur kernel as well as a denoised and deblurred image from a single noisy and object motion blurred image. A proposed method takes the advantage of the sparse representation of double discrete wavelet transform-a generative model of image blur that simplifies the wavelet analysis of a blurred image-and the Bayesian perspective of modeling the prior distribution of the latent sharp wavelet coefficient and the likelihood function that makes the noise handling explicit. We demonstrate the effectiveness of the proposed method on moderate noise and severely blurred images using simulated and real camera data.