

A Unified Tight Frame Approach For Missing Data Recovery In Images

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In many practical problems in image processing, the observed data sets are often incomplete in the sense that features of interest in the image are missing partially or corrupted by noise. The recovery of missing data from incomplete data is an essential part of any image processing procedures whether the final image is utilized for visual interpretation or for automatic analysis. In this talk, we will discuss our new iterative algorithm for image recovery for missing data which is based on spline tight framelets. We consider in particular few main applications in image processing, inpainting, impulse noise removal and super-resolution image reconstruction.