

## Low Complexity Deblocking Algorithm

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**Abstract :** A low computational deblocking filter including three frequency related modes (smooth mode, intermediate mode, and non-smooth mode for low-frequency, mid-frequency, and high frequency regions, respectively) is proposed. The suggested approach requires zero additions, zero subtractions, zero multiplications (for intermediate region), no divisions (for non-smooth region) and no comparison. The suggested method thus keeps the computation lower and thus suitable for image coding systems based on blocks. Comparison of average number of operations for smooth, non-smooth, intermediate (per pixel vector for each block) using filter suggested by Chen and the proposed method filter suggests that the proposed filter keeps the computation lower and is thus suitable for fast processing algorithms.

**Keywords :** blocking artifacts, computational complexity, non-smooth, intermediate, smooth

**Conference Title :** ICMSSP 2016 : International Conference on Multimedia Systems and Signal Processing

**Conference Location :** Amsterdam, Netherlands

**Conference Dates :** May 12-13, 2016