De-Ghosting Methods

There are already a lot of de-ghosting algorithms that have been developed in the last decade. The following table shows the classification of these algorithms which is based on a few parameters:

- **Fusion domain** - radiance or image
- **Number of exposures needed for good results of the algorithm**
- **Ghost map detection** - if ghost map detection is first computed and number of ghost maps - one or more using one exposure as a reference image
- **Thresholds tuning** - some input parameters such as a threshold value has to be set automatically or manually, respectively
- **Reference image selection** - if one of the input images is used as a reference
- **Final result with an occurrence of moving object at fixed position or removal of all moving objects**

Methods marked by an asterisk follow all desired requirements for the real-time HDR FPGA video camera.

### Fusion in the radiance domain

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### Fusion in the image domain

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The following methods are selected from the existing de-ghosting algorithms as the appropriate solutions for the real-time HDR FPGA video camera.

### Histogram Based Algorithm

Fusion in the radiance domain

### Bitmap Movement Detection

Fusion in the image domain