



## Systems, Methods, And Media For High Dynamic Range Quanta Burst Imaging

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### The Invention

In accordance with some embodiments, systems, methods and media for high dynamic range quanta burst imaging are provided. In some embodiments, the system comprises: an image sensor comprising single photon detectors in an array; a processor programmed to: generate a sequence of binary images representing a scene; divide the sequence of binary images into blocks; generate block-sum images from the blocks; determine alignments between the blocksum images and a reference block-sum image; warp the sequence of binary images based on the alignments; generate warped block-sum images using warped binary images; merge the warped block-sum images; display a final image of the scene based on the merged warped block-sum images.

### Additional Information

#### For More Information About the Inventors

- [Mohit Gupta](#)

#### Tech Fields

- [Information Technology : Computing methods, software & machine learning](#)
- [Information Technology : Image processing](#)

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