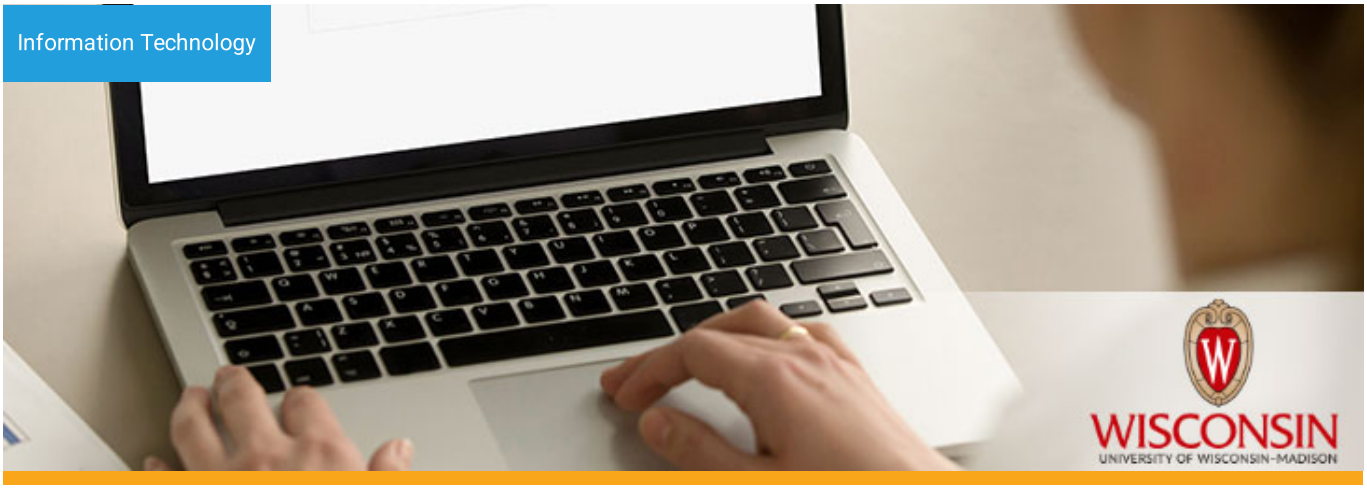
Information Technology



Systems, Methods, And Media For Determining Object Motion In Three Dimensions From Light Field Image Data

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WARF: P180154US01

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The Invention

In accordance with some embodiments, systems, methods and media for determining object motion in three dimensions using light field image data are provided. In some embodiments, a system for three dimensional motion estimation is provided, comprising: an image sensor; optics that create many images of a scene; and a hardware processor configured to: cause the image sensor to capture a first plurality of images; generate a first light field; cause the image sensor to capture a second plurality of images at a second time; generate a second light field; calculate light field gradients using the first light field and second light field; and calculate, for each point in the scene, three dimensional motion using the light field gradients by applying a constraint to the motion in the scene.

Additional Information

For More Information About the Inventors

- Mohit Gupta

Tech Fields

- Information Technology : Computing methods, software & machine learning
- Information Technology : Image processing

For current licensing status, please contact Michael Carey at mcarey@warf.org or 608-960-9867