Systems, Methods, And Media For Stochastic Exposure Coding That Mitigates Multi-Camera Interference In Continuous Wave Time Of- Flight Imaging

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Inventors: Mohit Gupta, Jongho Lee

The Invention

In accordance with some embodiments, systems, methods and media for stochastic exposure coding for continuous time-of-flight imaging are provided. In some embodiments, a method for estimating the depth of a scene is provided, comprising: stochastically selecting active slots based on a probability ; causing, during active slots, a light source to emit light modulated by a first modulation function toward a scene; causing, during active slots, an image sensor to generate a first, second, and third value based on received light from a portion of the scene and a first, second, and third demodulation function, respectively; inhibiting the light source during inactive slots; determining, for each of the active slots, depth estimates for the portion of the scene based on the first, second, and third value; and determining a depth estimate for the portion of the scene based on the depth estimates for the active slots.

Additional Information

For More Information About the Inventors

- Mohit Gupta

Tech Fields

- Information Technology : Image processing

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