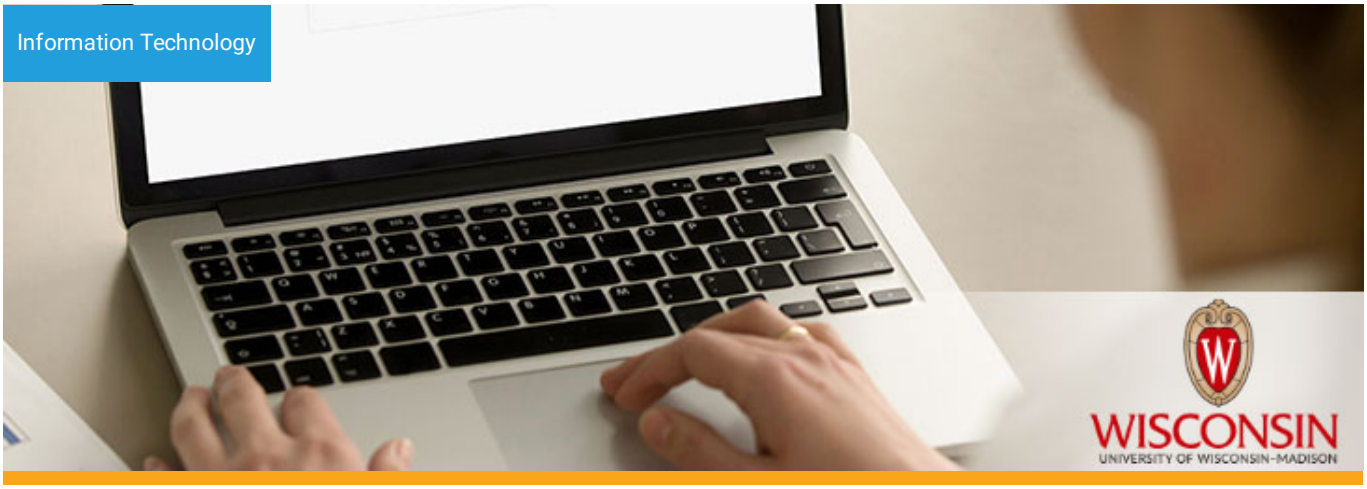
Information Technology



SYSTEMS, METHODS, AND MEDIA FOR MOTION ADAPTIVE IMAGING USING SINGLE-PHOTON IMAGE SENSOR DATA

View U.S. Patent No. 11,539,895 in PDF format.

WARF: P210073US01

Inventors: Andreas Velten, Trevor Seets, Atul Ingle

The Invention

UW-Madison researchers have developed a method that dynamically changes exposure times on a per pixel basis in response to changes in the scene. The method relies on taking a series of images, then (on chip or in post processing) applying statistical changepoint detection to estimate times that pixels have changed value, indicating motion or a change in lighting. Between detected changepoints the images can be averaged to create a sharp image that can be used to find scene motion, or motion can be directly inferred from the changepoints. This technique particularly is helpful in low illumination or high-speed situations where it is important to have as long an exposure time as possible without blurring.

Additional Information

For More Information About the Inventors

- Andreas Velten

Tech Fields

- Information Technology : Image processing

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