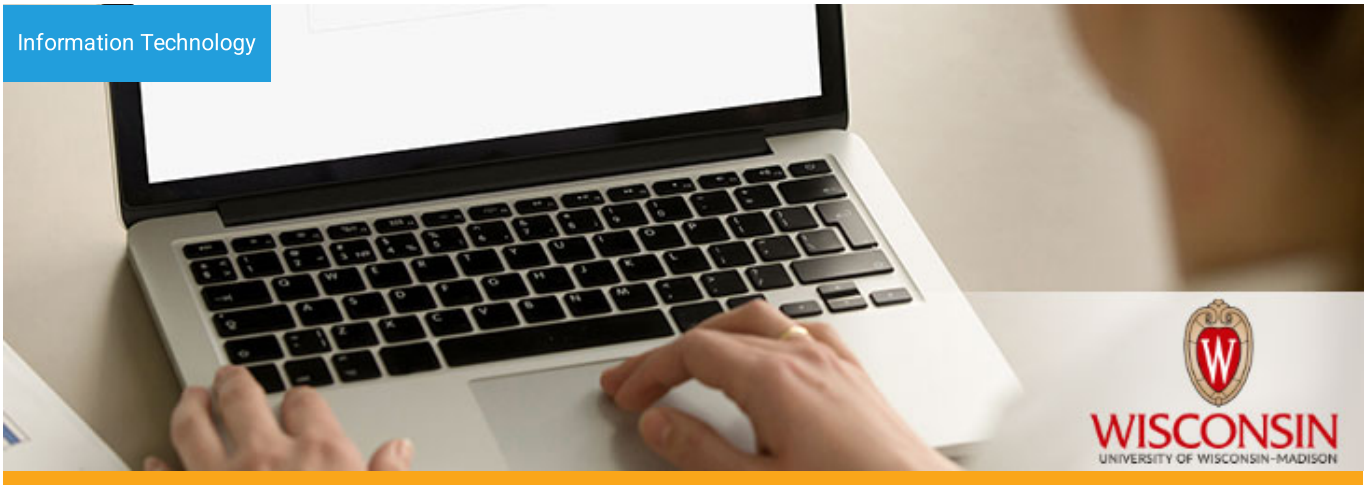
Information Technology



Systems, Methods And, Media For Encoding And Decoding Signals Used In Time Of Flight Imaging

View U.S. Patent No. 10,645,367 in PDF format.

WARF: P170189US01

Inventors: Mohit Gupta, Eric Breitbach, Andreas Velten, Shree Nayar

The Invention

In accordance with some embodiments, systems, methods and media for encoding and decoding signals used in time-of-flight imaging are provided. In some embodiments, a method for estimating the depth of a scene is provided, comprising: causing a light source to emit modulated light toward the scene based on a modulation function; causing the image sensor to generate a first value based on the modulated light and a first demodulation function of K modulation functions, including at least one trapezoid wave; causing the image sensor to generate a second value; causing the image sensor to generate a third value; and determining a depth estimate for the portion of the scene based on the first value, the second value, and the third value.

Additional Information

For More Information About the Inventors

- Mohit Gupta
- Andreas Velten

Related Intellectual Property

- View Continuation-in-Part Patent in PDF format.

Tech Fields

- Information Technology : Image processing

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