EE Seminar Series &
Dallas Chapter of IEEE Signal Processing Society Present

Stereoscopic 3D Processing for Handheld Devices

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11am, Wednesday, Nov. 10, 2010
ECSS 2.102 (TI Auditorium)

In this talk, I will provide an overview of stereoscopic 3D (S3D) image and video recording. I will discuss the key techniques for creating the 3D effect with low cost dual image sensors. Then I will discuss the challenges and tradeoffs for stereoscopic 3D processing on application processors targeted for handheld devices. The stereoscopic techniques include camera alignment, convergence, focus, exposure, and color balance. I will conclude the talk with a view of future areas of interest to evolve the stereoscopic 3D video quality and user experience.

Fred Ware joined Texas Instruments in 2003 and is a Member of the Technical Staff. He is currently part of the new innovative Natural User Interactions Group, where he is an imaging architect. He holds a PhD degree in electrical engineering from Texas A&M University, a MS degree in electrical engineering from University of California at Los Angeles, and a BS degree in electrical engineering from Howard University. He has worked extensively in research and development on a variety of software image and video application solutions on application processors designed for handheld devices. His current research interests include image and video quality enhancement techniques, stereoscopic 3D processing, and low power video hardware.

For more information on the Dallas Chapter of IEEE Signal Processing Society and directions to UTD, see **http://www.utdallas.edu/~kehtar/ieee-sp**