



***Dallas Chapter of IEEE Signal Processing Society &
Electrical Engineering Seminar Series Present***

Challenges and Methods in Embedded Video Analytics

**Dr. Vinay Sharma
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**11:00am, Wednesday, April 18, 2012
ECSS 2.102 (TI Auditorium)**

Vision technology embedded in software programmable cameras is enabling the transition of video analytics from the server to the edge in surveillance networks. Our presentation will focus on the challenges and methods of developing edge-based, embedded video analytics. Using examples of actual surveillance applications, we will describe various requirements and problems faced by computer vision algorithms. As we review methods to address these challenges, we will show how limited resources of embedded processors put additional constraints on vision algorithm design. The talk will conclude with an eye to the future of embedded video analytics, describing trends in new vision-based security applications targeted for embedded devices.

Vinay Sharma received the Ph.D. degree in Computer Science and Engineering from the Ohio State University and B.E. (Hons) degree in Computer Science from BITS Pilani, India. In 2008, he joined the Vision Branch of the Systems and Applications R&D Centre at Texas Instruments, where he has designed vision solutions on TI processors in areas such as video surveillance, camera-projector systems, and mobile phone applications. He has authored over 15 papers in peer-reviewed conferences and journals, and has numerous patent applications under review.

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