## "Visual Analysis of Crowded Scenes"

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Automatic segmentation and learning of dominant motion patterns or activities from a video is an important visual surveillance problem. Most of the current approaches assume that the observed scene is not crowded, and that reliable tracks of objects are available over longer durations. Therefore, these approaches are not extendable to more challenging surveillance videos of crowded environments like markets, subways, religious festivals, parades, concerts, football matches etc, where tracking of individual objects is very hard, if not impossible. In this talk, I will present our recent work on visual analysis of crowded scenes.



Dr. Mubarak Shah, Agere Chair Professor of Computer Science, and the founding director of the Computer Visions Lab at the University of Central Florida, is a researcher in a number of computer vision areas. He has worked in several areas including activity and gesture recognition, violence detection, event ontology, object tracking, video segmentation, story and scene segmentation, view morphing, ATR, wide-baseline matching, and video registration. He is a co-author of two books (*Motion-Based Recognition* (1997) and Video Registration (2003)) both by Kluwer Academic Publisher. Dr. Shah is a fellow of IEEE and IAPR. In 2006, he was awarded a Pegasus Professor award, the highest award at UCF, given to a faculty

member who has made a significant impact on the university, has made an extraordinary contribution to the university community, and has demonstrated excellence in teaching, research and service. He was an IEEE Distinguished Visitor speaker for 1997-2000 and received IEEE Outstanding Engineering Educator Award in 1997. He received the Harris Corporation's Engineering Achievement Award in 1999, the TOKTEN awards from UNDP in 1995, 1997, and 2000; Teaching Incentive Program award in 1995 and 2003, Research Incentive Award in 2003, Millionaires' Club awards in 2005 and 2006, University Distinguished Researcher award in 2007, honorable mention for the ICCV 2005 Where Am I? Challenge Problem, and was nominated for the best paper award in ACM Multimedia Conference in 2005. He is an editor of international book series on Video Computing; editor in chief of Machine Vision and Applications journal, and an associate editor of ACM Computing Surveys journal. He was an associate editor of the IEEE Transactions on PAMI, and a guest editor of the special issue of International Journal of Computer Vision on Video Computing.