COMPUTER VISION DISTINGUISHED SPEAKER SERIES

School of Electrical Engineering & Computer Science
University of Central Florida

Seeing Action

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Georgia Institute of Technology

Over the last decade or so, the computer vision task of Action Recognition – semantically labeling a sequence of video data as containing a particular action – has grown to become as fundamental as that of classic static object recognition. We have developed a variety of techniques for the representation and recognition of action, most specifically focusing on human behavior. Such behavior ranges from simple movements - atomic primitives, requiring no contextual or sophisticated sequence knowledge to be recognized – to high-level group activities - larger scale events that typically include multi-agent interaction with the environment and causal relationships. Action understanding straddles the division between perception and cognition, computer vision and artificial intelligence/cognitive science. I will present examples of our work in each of these areas covering domains ranging from the low-level recognition of aerobics moves and gestures, to both structural and statistical models of visual surveillance, to the semantic labeling of football plays.

2:00pm, September 17, 2007
Harris Engineering Center, Room 101
http://www.eecs.ucf.edu/~vision

Supported by the Dean of the College of Engineering and Computer Science

BIOGRAPHY



Aaron Bobick is Professor and Chair of the School of Interactive Computing at the Georgia Institute of Technology. He has B.Sc. degrees from MIT in Mathematics (1981) and Computer Science (1981) and a Ph.D. from MIT in Cognitive Science (1987). He is a pioneer in the area of action recognition by computer vision, having authored over 70 papers in this area alone. He joined the MIT Media Laboratory faculty in 1992 where he led the Media Lab DARPA VSAM project as well as a Dynamic Scene Analysis effort funded by the CIA. In 1999 Prof. Bobick joined the faculty at Georgia Tech where he became the Director of the GVU Center, a internationally known research center in computer vision, graphics, ubiquitous computing, and HCI. In 2003, the School of Interactive Computing was created and Prof. Bobick serves as Chair. He has served as a senior area chair for most international computer vision conferences and was recently Program Chair of IEEE Conference on Computer Vision and Pattern Recognition.