Seeing Action

Dr. Aaron Bobick
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