Machine Perception of Humans and their Activities

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Human identification and activity recognition using computer vision techniques has applications in surveillance, image/video indexing and retrieval and human-computer interaction. Dr. Chellappa will discuss his recent work on recognizing humans and their activities using video sequences. He poses the problem as one of statistical inference of object structures, their labels and motions from noisy video sequences using non-linear filtering techniques.

Specifically, Dr. Chellappa will present methods for simultaneous tracking and recognition of faces in video sequences, 3D face modeling, gait-based identification of humans and human activity modeling and anomaly detection using factorization theorem, statistical shape models and ontologies. Challenges due to aging and expressions and applications to medicine will also be briefly discussed.

2:00 pm, October 6th, 2005, Pegasus Ballroom, Student Union
http://www.cs.ucf.edu/~vision

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