COMPUTER VISION DISTINGUISHED SPEAKER SERIES

School of Computer Science
University of Central Florida

Machine Perception of Humans and their Activities

Dr. Rama Chellappa
University of Maryland

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

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

BIOGRAPHY

Since 1991, Dr. Rama Chellappa has been a Professor of electrical engineering and an affiliate Professor of computer science at the University of Maryland, College Park. He is also affiliated with the Center for Automation Research (Director) and the Institute for Advanced Computer Studies (Permanent member). Recently, he has been named a Minta Martin Professor of Engineering. Prior to joining the University of Maryland, he was an Assistant (1981-1986) and Associate Professor (1986-1991) and Director of the Signal and Image Processing Institute (1988-1990) with the University of Southern California, Los Angeles. Over the last 23 years, he has published numerous book chapters, peer-reviewed journal and conference papers. He edited a collection of Papers on Digital Image Processing (published by IEEE Computer Society Press), co-authored a research monograph on Artificial Neural Networks for Computer Vision (With Y.T. Zhou) published by Springer-Verlag, and co-edited a book on Markov Random fields (with A.K. Jain) published by Academic Press.