Conference web site:

http://www.science.uva.nl/research/mediamill/workshop/index.html

Title: Interpreting Human Activity with Integrated Video Understanding and

Sensor Analysis

Speaker: Howard Wactlar, Informedia, Carnegie Mellon University

Abstract:

This research creates a manageable information resource that enables more complete and accurate interpretation, assessment and diagnosis of human behavior in constrained physical spaces. Through activity and environmental monitoring, a continuous, voluminous audio and video record is captured. Through work in information extraction, behavior analysis and synthesis, this record is transformed into an information asset whose efficient, secure presentation empowers specialists with greater insights into problems, effectiveness of treatments, and determination of environmental and social influences. Application environments range from nursery schools to nursing homes.

The foundation for this work, the Informedia Digital Video Library, has demonstrated the successful application of speech, image, and natural language processing in automatically creating a rich, indexed, searchable multimedia information resource for broadcast-quality video. This new work builds from these technologies, moving into new information spaces composed of unedited personal experience video augmented with additional sensory and position data.