Call for Papers
1st ACM International Workshop on Vision Networks for Behaviour Analysis (VNBA ’08)
(In conjunction with ACM Multimedia ’08)
Vancouver, BC, Canada
October 31, 2008
http://imagelab.ing.unimo.it/vnba08

Available Datasets for VNBA ’08

**ViSOR - Video Surveillance Online Repository**

The project ViSOR (http://imagelab.ing.unimore.it/visor) will be presented during the workshop. VISOR is a web based repository to collect and share annotated surveillance videos. The Imagelab group will be glad to explain you how upload and download your videos, interact with our surveillance ontology, upload and download annotations as well as some useful tools to provide new annotations and to perform performance evaluation tasks. Please, contact Roberto Vezzani if you have other questions.

**ViHASi: Virtual Human Action Silhouette Data**

ViHASi (http://dipersec.king.ac.uk/ViHASI/) is a large body of synthetic video data generated for the purpose of evaluating different algorithms on human action recognition which are based on silhouettes. The data consist of 20 action classes, 9 actors and up to 40 synchronized perspective camera views.

**Scope**

This workshop marks a new era of the successful series of the Video Surveillance and Sensor Networks (VSSN) workshops, held until 2006 in conjunction with ACM Multimedia conference (Berkeley 2003, New York 2004, Singapore 2005, and Santa Barbara, 2006). This new version of the workshop inherits from VSSN the experienced Technical Program Committee as well as the interests of its community, but shifts the focus to cover higher level topics and applications under the common framework of “behaviour analysis”, hence aiming to adapt to the evolved directions of interest in the field, and reaching out to other research communities with overlapping interests.

Behaviour analysis owes its recent success to more effective and robust techniques for object/people detection and tracking that permit the shifting of the interest towards higher levels of scene understanding. Moreover, thanks to the proliferation of inexpensive vision sensors, embedded processors, and efficient wired/wireless networks, a large amount of research has focused on exploiting multiple sources of information for behaviour analysis. This has also ushered in potentials for novel applications such as immersive human-computer interfaces for virtual reality, gaming and gesture-based control, occupancy sensing and event detection for smart environment applications, and human-centric applications such as fall detection in elderly care. Besides the evident advantages, realization of networks of vision sensors embodies several challenges in data management and fusion, operation of distributed sensing and processing units, and algorithmic techniques for effective extraction of interesting behaviours with efficient handling of redundant data.

With these premises, the workshop on VNBA will bring together researchers, developers and practitioners from academia and industry to discuss various issues involved in developing vision networks for behaviour analysis. The one-day workshop will be organized in oral and poster/demo presentations. The oral session will include papers presenting critical advances on both theoretical aspects and practical implementations of new generations of vision networks for behaviour analysis, whereas the poster/demo session will place special emphasis on recent innovative and brave projects. Selection of papers for the different sessions will be based on the content and suitability of the format that allows better knowledge transfer to the audience. To cover the different application domains for behaviour analysis, the workshop will be organized in two tracks. The morning lecture track will focus on surveillance and the afternoon lecture track will include presentations on smart environment applications.
**Topics**
The workshop topics will include, but are not limited to, the following:

- **Surveillance Track:**
  - People tracking in extreme conditions
  - Multi-person gesture, behaviour, and interaction analysis
  - Multi-camera coordination for behaviour analysis
  - Event recognition for security applications (abandoned luggage, restricted area violation, ...)
  - Crowd analysis for behaviour monitoring and alerting
  - Aggressive behaviour detection

- **Smart Environments Track:**
  - People-to-people interactions in smart environments
  - Object and environment discovery via user interactions
  - Abnormal behaviour / accident detection for patient/elderly monitoring
  - Occupancy sensing for automation and control
  - Gesture analysis for HCI
  - Applications in virtual reality, multimedia, gaming

Accepted papers for oral and poster presentations at the workshop will be included in the workshop’s proceedings, which will be published together with the proceedings of the ACM Multimedia Conference 2008. In addition, a special issue or an edited volume will be organized after the workshop by recommending to the authors of a selection of the best presented papers to submit a substantially extended version of their workshop papers.

**Submission procedure**
The paper format page contains guidelines about page limits, font sizes, and overall page layout. The paper should be no longer than 8 pages in the ACM style sheet in English. We ask that you do not deviate from these guidelines since this will be a cause for paper rejection without review.

Papers can be submitted by email (max. file size: 8MB) at the address vnba08@unimore.it.

**Important Dates**
- Paper submission: June 28, 2008 **July 7, 2008 (EXTENDED)**
- Notification: July 15, 2008 **July 28, 2008 (EXTENDED)**
- Final paper: **Aug 1, 2008**

**Organization**
- **General Chairs:** Hamid Aghajan (Stanford University, USA), Andrea Prati (University of Modena and Reggio Emilia, Italy)

- **Honorary chairs:** J. K. Aggarwal (University of Texas, USA), Rita Cucchiara (University of Modena and Reggio Emilia, Italy)

**Program Committee**
- Rama Chellappa, University of Maryland, USA
- Isaac Cohen, Honeywell Labs, USA
- Massimo Piccardi, University of Technology at Sydney Australia
- Sergio Velastin, Kingston University, UK
- Larry Davis, University of Maryland, USA
- Francois Bremond, INRIA Sophia Antipolis, France
- Nicu Sebe, University of Amsterdam, The Netherlands
- Antonis Argyros, University of Crete and FORTH-ICS, Greece
- Mohan Trivedi, University of California at San Diego, USA
- Davide Brunelli, University of Bologna, Italy
- Demetri Terzopoulos, University of California at Los Angeles, USA
- Pradeep Atrey, University of Winnipeg, MB, Canada
- James Davis, Ohio State University, USA
- Abtin Keshavarzian, Bosch Research Center, USA