

# 1st Workshop on Understanding Human Activities: Context and Interactions

(in Conjunction with ICCV 2013, Sydney, Australia)

Activity recognition is one of the core problems in computer vision. Recently it has attracted the attention of many researchers in the field. It is significant to many vision related applications such as surveillance, video search, human-computer interaction, and human-human, or social, interactions. Recent advances in feature representations, modeling, and inference techniques led to a significant progress in the field. Motivated by the rich and complex temporal, spatial, and social structure of human activities, activity recognition today features several new challenges, including modeling group activities, complex temporal reasoning, activity hierarchies, human-object interactions and human-scene interactions. These new challenges aim to answer questions regarding the semantic understanding and high-level reasoning of image and video content. At this level, other classical problems in computer vision, like object detection and tracking, not only impact, but are often intertwined with activity recognition. This inherent complexity prompts more time and thought to be spent on developing solutions to tackle auxiliary problems to the human activity recognition problem.

#### **Call for Papers**

The workshop invites interested participants to submit papers presenting original research in computer vision, pattern recognition, human science, and behavioral modeling. We also invite both application-driven and theoretical submissions from other related domains. Topics of interest include, but are by no means limited to:

- Action recognition from still images or videos
- Spatio-temporal modeling of human activities
- Human behavioral modeling (note: specify what is the type of behavior)
- Modeling human-object interactions
- Modeling scene context for activity recognition
- Group and inter-group activity recognition
- Individual and group activity prediction
- Surveillance and video analysis
- Activity based video search and indexing
- Crowd analysis
- New action recognition datasets

Papers must be in PDF format and must not exceed 8 pages. Authors will have the chance to submit up to 5MB of supplementary material. All submissions are subject to a double-blind review process. Paper submissions must adhere to the same <u>formatting</u> and the same <u>policies</u> established for the main conference. Dual submissions with any other workshop or conference are not allowed. The tentative submission deadline is September 5th, 2013 (Midnight EDT).

## Confirmed guest speakers

Abhinav Gupta - Carnegie Mellon University, USA Ivan Laptev - INRIA / Ecole Normale Superieure, France Michael. S. Ryoo - NASA / Jet Propulsion Laboratory, USA Ashutosh Saxena - Cornell University, USA Song-Chun Zhu - University of California, Los Angeles, USA

### Best regards,

#### The workshop organizers

Sameh Khamis - University of Maryland, USA Mohamed R. Amer - Oregon State University, USA Wongun Choi - University of Michigan, USA Tian Lan - Simon Fraser University, Canada