



# LTDT 2014

# Long-Term Detection and Tracking

Columbus, Ohio



## Long-Term Detection and Tracking (LTDT Workshop)

Proposed to be held in conjunction with CVPR 2014

There has been substantial progress to date in developing online methods for visual detection and tracking. However, few -- if any -- current systems in the literature can demonstrate fully automated detection and tracking that is capable of running reliably for long periods (days, weeks, or even months) without the need for human intervention to reset or re-initialize the tracker. While some recent papers have reported tracking results with longer sequences (~10K frames), for instance "Motocross", "Car Chase" and "Volkswagen" from the TLD dataset, the problem of tracking in extended sequences is still very much an open challenge. For the purpose of this workshop, a "long-term sequence" is a video that is at least 2-minutes long (at 25-30 fps), but ideally more towards 10 minutes in length. The main focus of this workshop is to stimulate research towards attaining reliable, autonomous visual tracking of single and/or multiple objects, over long periods.

The workshop will include oral presentations of peer-reviewed papers, invited talks and an afternoon demo session where paper presenters and other workshop participants show results of their tracking systems, concluding with a floor discussion to identify open challenges and opportunities.

Papers addressing various aspects of detection and tracking in *long-term sequences* are invited. Possible paper topics include, but are not limited to:

- Machine learning approaches
- Handling drift and/or learning in the presence of concept drift
- Exploiting the "big data" aspects of long-term detection and tracking
- Theoretical analysis of stability and performance bounds
- Data association
- Detection and tracking over extended space and extended time
  - multi-camera systems, e.g., stereo, distributed camera networks
  - moving cameras, e.g., vehicles, robots, aerial platforms
  - handheld devices
  - wearable devices, e.g., first person vision systems
- Calibration
- Quantitative evaluation

For further information please visit the website:

<http://www.micc.unifi.it/LTDT2014>

## Organizers:

Alberto del Bimbo, U. of Firenze  
Octavia Camps, Northeastern U.  
Rita Cucchiara, U. of Modena  
Jiri Matas, Czech Technical U., Prague  
Federico Pernici, U. of Firenze  
Stan Sclaroff, Boston U.

## Program Committee

Horst Bischof, TU Graz  
Lisa M Brown, IBM  
Andrea Cavallaro, Queen Mary  
Robert Collins, Penn State  
Omar Javed, SRI  
Gerard Medioni, USC  
Alfredo Petrosino U. of Naples  
Yoichi Sato, U. Tokyo  
Arnold Smuelders, CWI Amsterdam  
Peter Tu, GE Global  
Research Qian Yu, SRI

## Web Chair

Iacopo Masì, U of Firenze

## Invited Speakers

Stefano Soatto, UCLA  
Arnold Smuelders, U Amsterdam (UvA)  
Peter Meier, CTO Metaio

## Important Dates

Submission deadline: April 4, 2014  
Notification: April 25, 2014  
Camera ready: May 9, 2014  
Workshop: June 28, 2014

