



INO  
NATIONAL INSTITUTE  
OF OPTICS



UNIVERSITÀ  
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ACVR  
2014

## Second International Workshop on Assistive Computer Vision and Robotics

*In Conjunction with*



Assistive technologies provide a set of advanced tools that can improve the quality of life not only for disabled, patients and elderly but also for healthy people struggling with everyday actions. After a period of slow but steady scientific progress, this scientific area seems to be mature for new research and application breakthroughs. The rapid progress in the development of integrated micro-mechatronic and computer vision tools has boosted this process.

In addition, the interest in this research field has further recently increased due to the affordable fallouts of the technologies and methodologies involved in both traditional challenging related problems (such as monitoring of car drivers, behaviors analysis in surveillance contexts, ...) and pioneering topics (such as customer behavior analysis, innovative sales strategies,...).

However, many problems remain open especially as regards to environment perception and interaction of these technological tools with people.

The goal of the workshop is then to give an overview of the state of the art of perception and interaction methodologies involved in this area with special attention to aspects related to computer vision and robotics.

In particular, the International Workshop on Computer Vision and Robotics subsidiaries (ACVR) aims to bring together researchers working on problems of robotics and vision related to developing assistive technologies.

Research papers are solicited in, but not limited to, the following areas topics:

- Augmented and Alternative Communication
- Human - Robot Interaction
- Mobility Aids
- Rehabilitation Aids
- Home Healthcare
- Technology for Cognition
- Automatic Emotional Hearing and Understanding
- Activity Monitoring Systems
- Manipulation Aids
- Scene Understanding
- Life-logging
- Visual Attention and Visual Saliency
- Smart Environments
- Safety and Security
- Quality of Life Technologies
- Navigation Systems
- Sensory Substitution
- Mobile and Wearable Systems
- Applications for the Visually Impaired
- Applications for the Ageing Society
- Datasets and Evaluation Procedures
- Personalized Monitoring
- Video Summarization
- Egocentric and First-Person Vision

#### Important Dates

Full Paper Submission: **25 June 2014**

Notification of Acceptance: **20 July 2014**

Camera-Ready paper due: **31 July 2014**

Workshop: **September 12<sup>th</sup>, 2014**

#### Venue

Workshop will take place in Zürich at the [Swiss Federal Institute of Technology](http://www.ethz.ch) main building.

#### Contacts

[ACVR2014@gmail.com](mailto:ACVR2014@gmail.com)

#### Workshop Chairs:

**Giovanni Maria Farinella** (University of Catania, IT)

**Marco Leo** (CNR-Institute of Optics, IT)

**Gerard G. Medioni** (University of Southern California, US)

**Mohan Trivedi** (University of California San Diego, US)

## Technical Program Committee

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Giovanni Indiveri (University of Salento, IT)	Serge J. Belongie (University of California, US)
Giuseppe Vizzari (University of Milano-Bicocca, IT)	Silvio Savarese (University of Michigan, US)
Henry Kautz (University of Rochester, US)	Takeo Kanade (Carnegie Mellon University, US)
James Coughlan (Smith-Kettlewell Institute, US)	Zhigang Zhu (City College of New York, US)

### Invited speakers:

#### **Prof. Amnon Shashua**

(School of Computer Science and Engineering - The Hebrew University of Jerusalem)

will give a talk about

*"Computer Vision for the Visually Impaired: Challenges and Lessons Learned from the OrCam Project"*

#### **Prof. Roberto Manduchi**

(University of California - Santa Cruz)

will give a talk about

*"Maximizing Abilities through Technology, Education, and Research"*

## Submission and Revision

Papers will be submitted through a Content Management Toolkit. Additional information will be available soon.

The format for paper submission is the same as the ECCV main conference.

Please follow instructions on the ECCV 2014 website <http://eccv2014.org/author-instructions/>.

ACVR reviewing will be double blind, in that authors will not know the names of the area reviewers of their papers, and area reviewers do not know the names of the authors.

Each submission will be reviewed by at least three reviewers for originality, significance, clarity, soundness, relevance and technical contents.

### Journal Special Issue:

The authors of the accepted papers could be invited to submit an extended version (at least 40+% different than the workshop versions) of their papers to a Journal Special Issue (with open call and peer review). More information will be soon available.

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