


	<p style="text-align: center;">3rd Workshop on HUMAN MOTION Understanding, Modeling, Capture and Animation</p> <p style="text-align: center;">Hersonissos, Heraklion, Crete, Greece September 10, 2010 In Conjunction with ECCV 2010</p>	 <p>The logo for Lecture Notes in Computer Science (LNCS) is located in the top right corner of the table. It features a red and yellow grid pattern with the text 'Lecture Notes in Computer Science' in white. Below the grid, there are three colored boxes: a red one with 'LNCS', a blue one with 'LNAI', and a green one with 'LNBI'.</p>
--	---	--

ORGANIZERS:

Ahmed Elgammal, Rutgers University, USA -- elgammal (at) cs.rutgers.edu
Bodo Rosenhahn, MPI Informatics, Germany -- rosenhahn (at) tnt.uni-hannover.de
Leonid Sigal, Disney Research Pittsburgh, USA -- lsigal (at) disneyresearch.com

IMPORTANT DATES:

Paper Submission: June 17th, 2010
Notification: July 8th, 2010
Camera ready version: July 15th, 2010
Workshop Date: September 10, 2010

PUBLICATION:

The workshop proceeding will be published as a volume in [Springer's Lecture Notes in Computer Science \(LNCS\)](#) at the time of the workshop.

WORKSHOP GOALS:

Modeling, tracking and understanding of human motion based on image sequences (such as video) is a field of research of increasing importance, with applications in sports sciences, medicine, biomechanics, animation (avatars), surveillance, and so forth. Progress in human motion analysis depends on research in computer graphics, computer vision and biomechanics. Though these fields of research are often treated separately, human motion analysis requires an interaction of computer graphics with computer vision, which also benefits from an understanding of biomechanic constraints.

Eadweard Muybridge (1830-1904) is known as the pioneer in motion capturing with his famous experiments in 1887 called "Animal Locomotion" (Do all feet leave the ground during the gallop of a horse? He used photography to answer the question.) The field of animal or human motion analysis has developed into many directions since then. However, human-like animation and recovery of motion is still far from being satisfactory. Various groups are dealing with different aspects of modeling, estimation and animation of human motions. Motivations differ, and define directions of research. Examples of motivations are the analysis of movements for disease detection (hip dislocations, knee injuries etc.), sports movement optimization (ski or high jumping, golf playing, swimming, etc.), the animation of avatars in movies (e.g. Gollum in Lord of the Rings), or the realistic character animation in computer games.

The goal of this workshop is to encourage interaction and to post collaboration between researches in computer vision, animation, and biomechanics. New results and specific research strategies will be discussed at the workshop to approach this highly complex field. The intention is to discuss theoretical fundamentals related to those issues and to specify open problems and major directions of further development in the field of human motion related to computer vision, computer graphics or biomechanics. The workshop encourages interdisciplinary (vision + graphics, biomechanics + vision, etc.) contributions.

WORKSHOP HISTORY:

The [1st issue of this workshop took place in June 2006 at Dagstuhl/Germany](#), co-chaired by B. Rosenhahn, D. Metaxas, and R. Klette. As a result of the first workshop a book was published titled "[Human Motion - Understanding, Modeling, Capture and Animation](#)", Springer Computational Imaging Series, 2007. ISBN: 1402066929.

The [2nd issue of this workshop took place in October 2007, in association with ICCV 2007](#). co-chaired by A. Elgammal, B. Rosenhahn, and R. Klette. The 2nd workshop proceeding was published as [volume number 4814](#) in [Springer's Lecture Notes in Computer Science \(LNCS\)](#) at the time of the workshop.

TOPICS:

Paper submissions are solicited in the following topics

- 2D or 3D Tracking
- Modeling and Animation
- Biomechanics
- Learning and Recognition of Human Actions
- Motion Capture

- Benchmarking
- Sensor fusion for human motion estimation (e.g., using cameras, structured lighting, or a laser range scanner).

Further subjects are possible as long as in the general field of the workshop.

Papers should describe original and unpublished work about the above or closely related topics. Each paper will receive 3 double blind reviews, which will then be moderated by the workshop chairs

PROGRAM COMMITTEE:

TBA