



**Special Session and Competition
On
Robot Vision
CALL FOR PAPER**



Cairo, Egypt 8th-10th Dec. 2012

<http://www.egyptscience.net/AMTA12/Competition.html>



Organizers:

Mohammed A.-M. Salem,
Faculty of Computer and
Information Sciences, Ain
Shams Univ., Egypt.
salem@cis.asu.edu.eg
Tel.: +2011 1727 1050

Barbara Caputo,
Research Institute, Martigny,
Switzerland,
bcaputo@idiap.ch

Session Committee:

Mohammed El-Helw,
Nile University, Egypt
Hossam Fahim,
Ain Shams Univ., Egypt
Aboul Ella Hassanien,
Cairo University, Egypt
Alaa Khamis,
German Univ. in Cairo, Egypt
Beate Meffert,
Humboldt-Univ., Germany
Ulrich Rueckert,
Univ. Of Bielefeld, Germany
Abdel-Badeeh M. Salem,
Ain Shams Univ., Egypt
Mohammed F. Tolba,
Ain Shams Univ., Egypt

Keynote Speakers:

Jesus Martinez Gomez,
*Univ. of Castilla-La Mancha,
Spain*
Andrzej Pronobis,
*The Royal Institute of
Technology, Sweden*

Organized as a part of

**The First International Conference
on Advanced Machine Learning
Technologies and Applications
(AMTA 2012)**

In cooperation with

**ImageCLEF 2012
Cross-Language Image Retrieval
Evaluations,
The Task of Robot Vision**

Overview: The special session of Robot Vision focuses on the problem of vision-based localization. Based on an image sequence the robot has to be able to answer the question of "Where am I?" In cooperation with ImageCLEF 2012 we offer a test database of sequences of images captured by a perspective camera and a kinect mounted on a mobile robot within an office environment. Using the kinect device the images captured will offer additional information of the depth of the objects of the surrounding environment. The authors are encouraged to use these data as test data for the experimental work of their research work. However, submissions of papers which address the problem of the special session and not use these data are accepted.

Topics of this session include but not limited to:

- Vision-based Environmental Modeling
- Navigation and Optimal Path Planning
- Multi-Robot Systems and Robot Networks
- Vision-based [Simultaneous] Localization and Mapping
- Robotics for Rescue, Search and Disaster Manipulation Operations
- Social Robots and Human-Robot Interaction
- Computational Intelligence in Robotics
- Medical and Bio-Robotics
- Space and Underwater Robots

The Competition: The competition is sponsored by the IEEE Robotics and Automation Society - Egypt Chapter. The participation and competition rules as well as the evaluation rules are the same as those used for ImageCLEF 2012, which are published on its website and the website of this session. The first three winners will be awarded honor certificates from the IEEE Robotics and Automation Society - Egypt Chapter. The datasets of ImageCLEF 2012 will be available for participants. Three training sequences will be provided for training: TrainingCloudy1, TrainingCloudy2, and TrainingNight1. Two additional datasets will be available for the final experiments: TestData1, TestData2. More description of the dataset will be available on the website.

Paper Submission and Publications: Authors are invited to submit original research contributions not concurrently submitted elsewhere. Normal length papers should be 6 pages, formatted in Springer's single column format (detailed instructions for submissions are given below). Submitted papers will be refereed by at least three reviewers for quality, correctness, originality, and relevance. Notification and reviews will be communicated via e-mail. All accepted conference papers will be presented at the conference and included in the published proceedings by Springer's CCIS (Communications in Computer and Information Science) Series. Please follow the instructions on Springer's LNCS webpage: <http://www.springer.com/computer/lncs?SGWID=0-164-7-72376-0> when formatting to ensure that your paper is included in the proceedings (The LaTeX and Microsoft Word templates can be found for downloading). Please send your submission in pdf form to salem@cis.asu.edu.eg

Important Dates:

Deadline for paper submission:	September 8,	2012
Notification of Acceptance:	October 8,	2012
Deadline for Camera-ready Submission:	October 30,	2012
Registration Deadline:	October 30,	2012
Conference dates:	December 8th-10th,	2012