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## CALL FOR PAPERS

Computer Vision in Natural Environments: agriculture and forestry (CVNE)

<http://www.dacya.ucm.es/cvne2011>

San Cristóbal de La Laguna, Tenerife, Spain, 7th-11th November 2011

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The purpose of this edition is to provide a discussion forum on the most recent and innovative works in the area of computer vision applied to agricultural and forestry images. Both academic researchers and industry practitioners are welcome to a forum where the focus will be on discussion and exchange of ideas.

Sensors in agriculture and forestry play an important role today. In agriculture and silviculture, as a branch of forestry, the need for increasing the production and simultaneously the efforts for minimizing the environmental impact and for saving costs make the sensor systems the best allied tool. The use of sensors helps to exploit all available resources appropriately and to apply hazardous products moderately. When nutrients in the soil, humidity, solar radiation, density of weeds and all factors affecting the production are known, this gets better and the use of chemical products such as fertilizers, herbicides and other pollution products can be reduced considerably. These activities fall inside the emerging area known as Precision Agriculture. In forest management, which can be considered a branch of forestry, a lot of number of activities is oriented towards wood production or forest inventories with the aims of controlling parameters of interest such as diameter of trees, height, crown height, bark thickness and other variables, such as canopy, humidity, illumination, CO<sub>2</sub> transformation, where the social acceptance is of interest.

For this task requires the use of sensors and in particular those that can acquire two-dimensional information, such as cameras that work well in the range of visible and infrared. The amount of work that can be found in prestigious scientific publications in recent years supports the importance and the difficulty of dealing with this type of information (images).

### TOPICS OF INTEREST

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- Sensors 2D for precision agriculture
- Perception of agriculture images
- Stereo applied in forestry
- Color and Texture
- Stereo and Structure from Motion
- Object Recognition
- Video Analysis and Event Recognition
- Statistical Methods and Learning
- Physics-based Modeling
- Segmentation

## PROGRAM COMMITTEE

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- Gonzalo Pajares, Universidad Complutense de Madrid
- Ángela Ribeiro, Centro de Automática y Robótica, CSIC
- José Jaime Ruz, Universidad Complutense de Madrid
- Rubén Fuentes-Fernández, Universidad Complutense de Madrid
- P. Javier Herrera, Universidad Complutense de Madrid
- Fernando Montes, INIA, Universidad Politécnica de Madrid
- Jesús Conesa-Muñoz, Centro de Automática y Robótica, CSIC
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- Dionisio Andujar, Instituto de Ciencias Agrarias, CSIC
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- Pablo García del Valle, Universidad Complutense de Madrid
- Guillermo Botella, Universidad Complutense de Madrid
- José Miguel Guerrero, Universidad Complutense de Madrid
- Martín Montalvo, Universidad Complutense de Madrid

## CONTRIBUTIONS

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Papers should not exceed 10 pages in the Springer Verlag LNCS style. Each accepted paper should be presented by one of the authors. Presentations consist of 10-15 minutes talk and 5 minutes for discussion. Presentations will be arranged according to the program schedule provided by CAEPIA organizers. Submissions are accepted in both English and Spanish, but only those submitted in English may be part of the Springer proceedings.

The papers must be submitted in anonymized form. Submitted papers will be evaluated according to their originality, technical content, style, clarity, and relevance to the workshop. Each paper will be reviewed by at least two independent referees using a double blind-review process. This means that author names and organization, references, acknowledgements, and any other information that might identify the authors shall be removed from the submitted version of the papers. Papers should be submitted in PDF format. All submissions will be done electronically using the following Web page:

<http://www.easychair.org/conferences/?conf=caepia2011>

The same as with the regular papers submitted to CAEPIA'11, workshops papers will be published in the two volumes of the conference proceedings: one published by Springer (LNAI series) containing a selection of the best papers and one published by Spanish Association for Artificial Intelligence with the rest of the accepted papers. At least one author of each accepted paper must register for the conference, in this way, they can attend to all the activities of the conference. Information about registration: [Registration in CAEPIA 2011](#)

## IMPORTANT DATES

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*Paper submission deadline:* 7 / May / 2011

*Acceptance notification:* 30 / Jun / 2011

*Camera ready submission:* 31 / July / 2011

*Workshop:* 7 – 11 / Nov / 2011

## ORGANISER

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