

# ***Processing and Classification of Satellite Imagery***

*Thematic Session within the VipIMAGE2009 - II ECCOMAS Thematic Conference on*

*Computational Vision and Medical Image Processing*

*Porto, Portugal, 14-16 October 2009*

[www.fe.up.pt/~vipimage](http://www.fe.up.pt/~vipimage)

[http://paginas.fe.up.pt/~vipimage/conference/thematic\\_sessions.html](http://paginas.fe.up.pt/~vipimage/conference/thematic_sessions.html)

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## ***FIRST ANNOUNCEMENT***

*We would appreciate if you could distribute this information by your colleagues and co-workers.*

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### **Description**

Images acquired from satellite platforms are increasingly common, not only as an essential support to scientific knowledge and technical applications, but also as an important component of graphic communication in the media. The current number and diversity of instruments and platforms for Earth Observation are indicators of the interest and usefulness of satellite imagery. Satellite imagery is available at different spatial resolutions and time frequency, multi-spectral to hyper-spectral, embracing different sections of the electromagnetic spectrum, using optical instruments or radar. While many images have a high economic cost for the user, sophisticated systems for the catalogue, search and distribution of free or low cost images over the Internet have become common and will be even more so in the near future. Nevertheless, taking real advantage of this impressive array of available images requires a parallel development of processing methods, devoted to render the original images into useful geodata and then into information. Also, these computational developments have to be transferred from their technological origin to those specialists requiring tools to deal with different kinds of imagery in their respective fields.

*Processing and Classification of Satellite Imagery* aims to be a forum in which innovative methods are presented and applied to cases of study in different fields. Participants are expected to discuss improvements and/or alternative applications, in the frame of constructive discussions between software developers and practitioners of image processing and image data analysis applied to any field involving Earth Observation.

### **Topics of interest include** (but are not restricted to):

Satellite Data acquisition and processing

Satellite Imagery

Geospatial Satellite Image processing

Pattern Recognition in Satellite Images

Satellite Image Segmentation and Classification methods

Advanced Remote Sensing Software

Integration of Remote Sensing Data with GIS Technology

Analysis of Time Series of Satellite Imagery

Spatial Analysis of remotely sensed imagery

Applications in Photogrammetry  
Applications in Hydrology  
Applications in Agriculture and Forestry  
Applications in Nature Conservation  
Applications in Defense and Security  
Applications in Environmental Monitoring and Characterization  
Applications in Geology and Climate  
Applications in Urban Planning and Development  
Applications in Natural Resources Management  
Applications in Coastal Zones Management  
Applications in Marine Biology and Oceanography  
Applications in Natural Hazards and Risk Assessment and Management

### **Publications**

The proceedings book will be published by the Taylor & Francis Group, as happened with VipIMAGE 2007 (ISBN: 9780415457774). The organizers will encourage the submission of extended versions of the accepted papers to related International Journals; in particular for special issues dedicated to the conference. One possibility already confirmed is the International Journal for Computational Vision and Biomechanics (IJCV&B).

As what happened with VipIMAGE 2007, the organizers will also propose the publishing of a book by SPRINGER (ISBN: 978-1-4020-9085-1), under the Computational Methods in Applied Sciences series, with invited works from the most important ones presented in conference.

### **Important dates**

- Deadline for Thematic Sessions proposals: January 15, 2009
- Submission of extended abstracts: March 15, 2009
- Lectures and Final Papers: June 15, 2009

### **Organizers**

#### **Artur Gil**

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