



**Proceedings of the First  
Automatic Image Annotation  
and Retrieval Workshop  
(AIAR2010)**

**October 6-8, 2010,  
Puebla, Mexico**

# First Automatic Image Annotation and Retrieval Workshop (AIAR2010)

October 6-8, 2010, Puebla, Mexico

[TIA-INAOE Research group](#),  
[National Institute on Astrophysics, Optics and Electronics](#),  
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## Preface

This volume is a selection of revised selected papers that were initially submitted and presented in the First Automatic Image Annotation and Retrieval Workshop 2010 (AIAR2010). The workshop was organized by the TIA-INAOE research group and it was held at INAOE in Tonantzintla, Puebla, Mexico, during October 6-8, 2010.

The goal of AIAR2010 was to bring together researchers and graduate students working on different aspects of image annotation and retrieval for promoting new collaborations and exchanging ideas. The scope of AIAR2010 included but was not limited to the following topics:

- Automatic image segmentation.
- Automatic image annotation and object recognition.
- Content-based, Annotation-based image retrieval.
- Image retrieval combining textual and visual information.
- Relevance feedback in multimodal image retrieval.

This volume comprises a total of 7 contributions: 2 on automatic image segmentation; 1 on video segmentation; 2 on image retrieval; 1 on image annotation and 1 on activity recognition. These works were presented at the workshop and the corresponding papers were subject to a peer reviewing process after the workshop. These papers report both concluded research and ongoing work. We found the work reported in all of the papers very interesting, we are pretty sure that these works are an important contribution towards improving image understanding.

## TIA Research group

TIA (Texto+Imágenes+Aprendizaje) is INAOE's research group on text processing, computer vision and machine learning. It was established on July 2006 with the goal of doing research that can help to bridge the semantic gap between low-level features (extracted from images) and high-level concepts (in which users are interested) for multimedia image retrieval. Accordingly, our research interests are on automatic

segmentation, automatic image annotation, content-based, text-based and annotation-based image retrieval and benchmarking multimedia image retrieval. All of the members of TIA research group collaborated in the organization of the workshop.

## **Organizers**

### **Workshop chairs**

- Enrique Sucar (INAOE, Mexico)
- Hugo Jair Escalante (UANL, Mexico)

### **Program committee (in alphabetical order)**

- Chengcui Zhang (UAB, USA)
- Concepción Pérez de Celis (BUAP, Mexico)
- Edel García Reyes (CENATAV, Cuba)
- Eduardo Morales (INAOE, Mexico)
- Enrique Sucar (INAOE, Mexico)
- Hugo Jair Escalante (UANL, Mexico)
- Jesús A. González (INAOE, Mexico)
- Luis A. Pineda (IIMAS-UNAM, Mexico)
- Manuel Montes y Gómez (UAB, USA)
- Olac Fuentes (UTEP, USA)
- Salvador Ruiz-Correa (CIMAT, Mexico)
- Stefan Rüger (Open University, UK)

### **Organizing Committee**

- Jesús A. González (INAOE)
- Aurelio López (INAOE)
- Eduardo Morales (INAOE)
- Manuel Montes y Gómez (INAOE, UAB)
- L. Enrique Sucar (INAOE)
- Luis Villaseñor (INAOE)
- Hugo Jair Escalante (UANL)

### **Invited speakers**

During the workshop we enjoyed the three tutorials given by experts in their respective fields. We are very grateful with Professors Stefan Rüger (Open University, UK), Humberto Sossa (CIC, Mexico) and Grigori Sidorov (CIC, Mexico) for their interesting talks and their willingness to exchange of ideas with students and researchers.

### **Acknowledgements**

We would like to thank all who contributed to the workshop. We thank authors for their submissions as well as to those persons that attended the workshop. We specially thank

invited speakers and the program committee for their good work in carefully reviewing the papers that helped the authors to improve their corresponding papers. We thank the support provided by INAOE. This workshop was supported by CONACYT under project grant 61335.

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