Jacques Blanc-Talon · David Helbert
Wilfried Philips · Dan Popescu
Paul Scheunders (Eds.)

Advanced Concepts for Intelligent Vision Systems

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Editors
Jacques Blanc-Talon
DGA
Bagneux
France

David Helbert
Laboratoire XLIM
Futuroscope Chasseneuil Cedex
France

Wilfried Philips
Ghent University
Ghent
Belgium

Dan Popescu
CSIRO-ICT Centre
Canberra, ACT
Australia

Paul Scheunders
University of Antwerp
Wilrijk
Belgium

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Preface

These proceedings gather the selected papers of the Advanced Concepts for Intelligent Vision Systems (ACIVS) Conference, which was held in Poitiers, France, during September 24–27, 2018.

This event was the 19th ACIVS. Since the first event in Germany in 1999, ACIVS has become a larger and independent scientific conference. However, the seminal distinctive governance rules have been maintained:

- To update the conference scope on a yearly basis. While keeping a technical backbone (the classic low-level image processing techniques), we have introduced topics of interest such as video analysis, segmentation, classification, remote sensing, biometrics, deep learning, and image and video compression, restoration and reconstruction. In addition, speakers usually give invited talks on hot issues.
- To remain a single-track conference in order to promote scientific exchanges among the audience.
- To grant oral presentations a duration of 25 minutes and published papers a length of 12 pages, which is significantly different from most other conferences.

The second and third items entail a complex management of the conference; in particular, the number of time slots is rather small. Although the selection between the two presentation formats is primarily determined by the need to compose a well-balanced program, papers presented during plenary and poster sessions enjoy the same importance and publication format.

The first item is strengthened by the notoriety of ACIVS, which has been growing over the years: official Springer records show a cumulated number of downloads on August 1, 2018, of more than 550,000 (for ACIVS 2005–2016 only).

The regular sessions also included a couple of invited talks by Yuliya Tarabalka (Inria Sophia Antipolis, France) and Mihai Datcu (DLR, Germany). We would like to thank all of them for enhancing the technical program with their presentations.

ACIVS attracted submissions from many different countries, mostly from Europe, but also from the rest of the world: Belgium, China, Czech Republic, Finland, France, Germany, India, Italy, Portugal, Korea, Romania, Saudi Arabia, Spain, the UK, the USA, and Vietnam.

From 91 submissions, 36 were selected for oral presentation and 16 as posters. The paper submission and review procedure was carried out electronically and a minimum of two reviewers were assigned to each paper. A large and energetic Program Committee, helped by additional reviewers, as listed on the following pages, completed the long and demanding reviewing process. We would like to thank all of them for their timely and high-quality reviews, achieved in quite a short time and during the summer holidays.

Finally, we would like to thank all the participants who trusted in our ability to organize this conference for the 19th time. We hope they attended a different and

stimulating scientific event and that they enjoyed the atmosphere of the various ACIVS social events in the city of Poitiers.

As mentioned, a conference like ACIVS would not be feasible without the concerted effort of many people and the support of various institutions. We are indebted to the local organizers Pascal Bourdon, David Helbert, Mohamed-Chaker Larabi, François Lecellier, Benoit Tremblais, and Thierry Urruty, for having smoothed all the harsh practical details of an event venue.

July 2018

Jacques Blanc-Talon
David Helbert
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