

Preface

These proceedings gather the selected papers of the Advanced Concepts for Intelligent Vision Systems (ACIVS) conference, which was held in Antwerp, Belgium, during September 18–21, 2017.

This event was the 18th 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 – chronologically – image and video compression, 3D, security and forensics, and evaluation methodologies, in order to fit the conference scope to our scientific community’s needs. 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, 2017, of more than 550,000 (for ACIVS 2005–2016 only).

The regular sessions also included a couple of invited talks by Professor Antonis Argyros (University of Crete), Professor Daniel Cremers (Technische Universität München), and Professor Sanja Fidler (University of Toronto). 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: Algeria, Australia, Austria, Brazil, Belgium, Canada, China, Cyprus, Czech Republic, Denmark, Ecuador, France, Finland, Germany, Hungary, India, Israel, Italy, Japan, Korea, Mexico, The Netherlands, Poland, Romania, Russia, Switzerland, Taiwan, Tunisia, Turkey, the Ukraine, United Arab Emirates, the UK, and the USA.

From 134 submissions, 38 were selected for oral presentation and 25 as posters. The paper submission and review procedure was carried out electronically and a minimum of three reviewers were assigned to each paper. A large and energetic Program Committee (67 people), helped by additional reviewers (86 people in total), 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.

Also, we would like to thank our sponsors, Antwerp University, Commonwealth Scientific and Industrial Research Organization (CSIRO), and Ghent University, for their valuable support.

Finally, we would like to thank all the participants who trusted in our ability to organize this conference for the 18th time. We hope they attended a stimulating scientific event and that they enjoyed the atmosphere of the various ACIVS social events in the city of Antwerp.

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 Rudi Penne and Paul Scheunders, for having smoothed all the rough practical details of an event venue, and we hope to welcome them in the near future.

July 2017

Jacques Blanc-Talon
Rudi Penne
Wilfried Philips
Dan Popescu
Paul Scheunders

Advanced Concepts for Intelligent Vision Systems
18th International Conference, ACIVS 2017, Antwerp,
Belgium, September 18-21, 2017, Proceedings
Blanc-Talon, J.; Penne, R.; Philips, W.; Popescu, D.;
Scheunders, P. (Eds.)
2017, XVI, 763 p. 339 illus., Softcover
ISBN: 978-3-319-70352-7