Call for papers:

1st International Workshop on Advanced Machine Vision for Real-life and Industrially Relevant Applications

Monday 3rd of December – all day
A workshop in conjunction with ACCV2018 in Perth, Australia.

We are proud to present the 1st International Workshop on **A**dvanced **M**achine **V**ision for Real-life and Industrially Relevant Applications (**AMV2018**). This workshop is in conjunction with ACCV2018, Perth, Australia and is scheduled on **Monday the 3rd of December 2018 (all day workshop)**.

A large variety of industrially oriented applications (e.g. quality control, pick and place) have in the past decades been successfully implemented throughout a wide range of industries. These implementations are characterized by very controlled surroundings and objects (e.g. CAD models of objects available, controlled lighting). *Advanced Machine Vision* refers to computer vision-based systems where such assumptions do not hold, for example, when handling biological objects as seen in the food-production industry or when operating outdoors. With recent advancements in sensing and processing power, the potential for further automation in industry based on computer vision is clearly present. Furthermore, the exploding domain of computer vision algorithms (e.g. deep learning) provides dozens of new opportunities. The ambition of this full-day workshop is to bring together practitioners and researchers from different disciplines related to *Advanced Machine Vision* to share ideas and methods on current and future use of computer vision algorithms in real-life and industrially relevant systems. This field raises the need of applied research that focuses on the technology transfer from academics towards practitioners, yielding several challenges like top-notch accuracies, real-time processing, minimal training data, minimal manual input, user-friendly interfaces, …

To this end we welcome contributions (full papers) with a strong focus on (but not limited to) the following topics within Advanced Machine Vision:

- Sensing (camera selection, camera setup, different wavelengths, multi-modal data, ...)
- Improving robustness of algorithms (real-time performance, non-controlled illumination, non-trivial intra- object variability, top-notch accuracies, ...)
- Removing or reducing the need of training data (data augmentation, artificial data, ...)
- Processing power and memory requirements
- Obtaining training data and ground truth annotations
- Lab testing versus inline testing
- Transfer learning towards new applicational domains
- Deep learning for advanced machine vision
- Quality assessment of non-trivial objects
- Real-life and industrially relevant applications

> **Important dates:**
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> Paper submission: September, 23rd
> Notification of acceptance: October, 20th
> Camera-ready deadline: October, 29th
> Workshop date: December, 3rd

For more information visit:

http://www.eavise.be/AMV2018/

*The workshop will provide a best paper award of **$1000** sponsored by iCetana. On top of that there will be a special issue of the Machine Vision and Applications journal following the workshop.*