

Preface

Vision is arguably the most important modality for humans to perceive their environment. Naturally, seeing machines have been the dream and goal of generations of scientists and engineers dealing with computer vision. While developments in algorithms and models have been enormous during the last decades, the computer vision community cannot but agree that implementing and deploying vision systems in real environments and applications is always a challenging task. This fact was the motivation behind the conception of the International Conference on Computer Vision Systems (ICVS), as well as the driving force that brought it from its debut at Las Palmas in 1999 to its 10th repetition at Copenhagen in 2015.

ICVS 2015 received 92 submissions, out of which 48 were selected after a double-blind review process. Each paper was reviewed by at least three members of the Program Committee and the authors of accepted submissions were asked to submit their final versions taking into consideration the comments and suggestions of the reviewers. The best paper of the conference was selected by the general and program chairs, after suggestions from the Program Committee. The accepted papers cover a broad spectrum of issues arising in the design and deployment of comprehensive computer vision systems. Among them, the two most represented topics were robot vision and vision systems applications, revealing the interest of the community in deploying vision systems in real conditions.

The pace of the technical program of ICVS 2015 was set by four invited speakers. First, Prof. John K. Tsotsos (York University, Canada) described how computer vision can be motivated by human vision. The second invited speaker, Prof. Henrik I. Christensen (Georgia Institute of Technology, USA), covered state-of-the-art model-based 2D and 3D tracking systems. The talk of Prof. Danica Kragic (Royal Institute of Technology - KTH, Sweden) was about machines that see, act, and interact with their environments. Finally, Dr. Achintya Bhowmik (Intel Corp., USA) talked about the approach of his perceptual computing group to bridging the real and virtual worlds with natural sensing and interactions.

Two tutorials were selected and organized in conjunction with the main conference. Both of them combined talks and active involvement of the audience. The “Tutorial on Commercial Industrial Vision Systems” was organized by Dr. Michael Nielsen, Thomas Sølund, and Carsten Panck Isaksen, while the second tutorial, “An Open-Source Recipe for Teaching/Learning Robotics with a Simulator,” was organized by Dr. Renaud Detry and Prof. Peter Corke.

We wish to thank our platinum sponsors, Intel, NVIDIA, and the Obel Family Foundation, our Sponsor, the Danish Technological Institute (DTI), as well as our Supporters, the Department of Mechanical and Manufacturing Engineering of Aalborg University, and Wonderful Copenhagen. Finally, we feel the need to thank the people who made ICVS 2015 happen, our Workshop and Tutorial Chairs Dr. Dima Damen

and Dr. Renaud Detry, our Publication Chair Dr. Dimitris Chrysostomou, our Local Chair Dr. Mikkel Rath Pedersen, the 79 members of our Program Committee, as well as all the authors who submitted their work to ICVS 2015.

May 2015

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Computer Vision Systems

10th International Conference, ICVS 2015,

Copenhagen, Denmark, July 6-9, 2015, Proceedings

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A. (Eds.)

2015, XV, 544 p. 240 illus., Softcover

ISBN: 978-3-319-20903-6