



Third Croatian  
Computer Vision Workshop  
September 16, 2014, Zagreb, Croatia

CCCVW

2014



University of Zagreb  
Center of Excellence  
for Computer Vision

PROCEEDINGS OF

# CCVW 2014

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Zagreb, Croatia, September 16, 2014

S. Lončarić, M. Subašić (Eds.)

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# Preface

On behalf of the Organizing Committee it is my pleasure to invite you to Zagreb for the 3<sup>rd</sup> Croatian Computer Vision Workshop. The objective of the Workshop is to bring together professionals from academia and industry in the area of computer vision theory and applications in order to foster research and encourage academia-industry collaboration in this dynamic field. The Workshop program includes oral and poster presentations of original peer reviewed research from Croatia and elsewhere. Furthermore, the program includes invited lectures by distinguished international researchers presenting state-of-the-art in computer vision research. Workshop sponsors will provide perspective on needs and activities of the industry. Finally, one session shall be devoted to short presentations of activities at Croatian research laboratories.

The Workshop is organized by the Center of Excellence for Computer Vision, which is located at the Faculty of Electrical Engineering and Computing (FER), University of Zagreb. The Center joins eight research laboratories at FER and research laboratories from six constituent units of the University of Zagreb: Faculty of Forestry, Faculty of Geodesy, Faculty of Graphic Arts, Faculty of Kinesiology, Faculty of Mechanical Engineering and Naval Architecture, and Faculty of Transport and Traffic Sciences.

Zagreb is a beautiful European city with many cultural and historical attractions, which I am sure all participants will enjoy. I look forward to meet you all in Zagreb for the 3<sup>rd</sup> Croatian Computer Vision Workshop.

September 2014

Sven Lončarić, General Chair

# Acknowledgements

The 2014 3<sup>rd</sup> Croatian Computer Vision Workshop (CCVW) is the result of the committed efforts of many volunteers.

All included papers are results of dedicated research. Without such contribution and commitment this Workshop would not have been possible.

Program Committee members and reviewers have spent many hours reviewing submitted papers and providing extensive reviews which will be an invaluable help in future work of collaborating authors. Managing the electronic submissions of the papers, the preparation of the abstract booklet and of the online proceedings also required substantial effort and dedication that must be acknowledged. The Local Organizing Committee members did an excellent job to guarantee a successful outcome of the Workshop.

We are grateful to the Technical Co-Sponsors, who helped us in granting the high scientific quality of the presentations, and to the Donators that financially supported this Workshop.

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