

Computer Vision Winter Workshop

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Retz, Austria

February 6 - 8, 2017

Publisher: Pattern Recognition and Image Processing Group, TU Wien & PRIP Club, Vienna, Austria
February, 2017
ISBN 978-3-200-04969-7

Preface

The 22nd Computer Winter Workshop was organized by the PRIP Club and the PRIP Group at the Institute of Computer Graphics and Algorithms at TU Wien. It took place at Symposium Hotel Althof in Retz, Austria, from February 6th till February 8th, 2017.

The Computer Vision Winter Workshop (CVWW) is the annual meeting of several computer vision research groups located in Graz, Ljubljana, Prague, and Vienna. We want to communicate fresh ideas within the groups, and provide conference experience to students. However, the workshop is open to everyone.

26 papers have been submitted to the workshop. Each of them was reviewed by at least 3 members of the program committee. 25 papers have been accepted, where 17 are oral presentations and 8 are posters.

A "Best Paper Award" with the prize money of € 500 (in cooperation with the Austrian Computer Society, OCG) was handed over to the paper nominated based on the presentation during the workshop and the written paper in the proceedings. In addition, there was a "Best Reviewer Voting" for the first time in the history of CVWW. The result was a ranking of the members of the program committee, which should be updated and continued in future workshops.

The co-chairs of the workshop would like to thank the local organizing

committee and the members of the program committee for their work, support and feedback.

Walter G. Kropatsch
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Nicole M. Artner

CVWW co-chairs

Committees

Co-Chairs:

Walter G. Kropatsch
Ines Janusch
Nicole M. Artner

Program Committee:

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Rok Mandeljc	Mario Vento
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Martin Matousek	Christoph Vogel

Mirko Navara
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Tomas Vojir
Sebastian Zambanini

Content

Invited talk: "Are we ready to use graphs in Pattern Recognition?" Mario Vento [PDF](#)

"Unsupervised Learning for Image Category Detection" Philipp Seeböck, René Donner and Georg Langs [PDF](#)

"End-to-End Training of Hybrid CNN-CRF Models for Semantic Segmentation using Structured Learning" Aleksander Colovic, Patrick Knöbelreiter, Alexander Shekhovtsov and Thomas Pock [PDF](#)

"Loss-Specific Training of Random Forests for Super-Resolution" Alexander Grabner, Georg Poier, Michael Opitz, Samuel Schulter and Peter Roth [PDF](#)

Invited talk: "Computer Vision - Mission Accomplished or Punk?" Wilhelm Burger [PDF](#)

"Pedestrian Detection in RGB-D Images from an Elevated Viewpoint" Christian Ertler, Horst Possegger, Michael Opitz and Horst Bischof [PDF](#)

"LBP Scale Space Origins for Shape Classification" Ines Janusch and Walter G. Kropatsch [PDF](#)

"From trajectories to behaviors: an algorithm to track and describe dancing birds" Leonardo Oliva, Alessia Saggese, Nicole M. Artner, Walter G. Kropatsch and Mario Vento [PDF](#)

"Automatic Stabilization of Image Sequences" Bertram Sabrowsky-Hirsch [PDF](#)

"Analysis and Calibration of a Mirror Setup producing Mirror-reflected, Multi-view Videos" Gianluigi Mucciolo, Barbara Konecny, Alessia Saggese, Nicole M. Artner, Walter G. Kropatsch and Mario Vento [PDF](#)

"Towards large-scale traffic sign detection and recognition" Peter Ursic, Domen Tabernik, Rok Mandeljc and Danijel Skocaj [PDF](#)

"Observation of Selected Human Physiological Parameters Using Computer Vision" Gregor Koporec, Rok Mandeljc, Vildana Sulič

Kenk, Goran Vučković, Radoje Milić and Janez Perš [PDF](#)

"Spotting Facial Micro-Expressions 'In the Wild'" Petr Husák, Jan Čech and Jiří Matas [PDF](#)

"Towards Dense SLAM with High Dynamic Range Colors" Sergey Alexandrov, Johann Prankl, Michael Zillich and Markus Vincze [PDF](#)

"Semantic segmentation for room categorization" Ajda Lampe, Luka Čehovin, Rok Mandeljc and Matej Kristan [PDF](#)

"Object Scene Flow with Temporal Consistency" Michal Neoral and Jan Šochman [PDF](#)

Invited talk: "Multi-Scale Molecular Data Visualization" Ivan Viola [PDF](#)