

Computer Vision Winter Workshop 2014

Křtiny, Czech Republic, Feb 3-5, 2014

Program

Monday, February 3rd

11:00 - 13:00 Arrival

12:00 - 14:00 Lunch

14:00 - 14:15 Opening

14:15 - 15:45 **Oral Session 1: Recognition**

- *Visual Recognition and Fault Detection for Power Line Insulators*
Markus Oberweger, Andreas Wendel, Horst Bischof (TU Graz)
- *Print Localization on Transparent Pharmaceutical Capsules*
Andraž Mehle, Marko Bukovec, Bostjan Likar, Franjo Pernuš, Dejan Tomaževič (Sensum; University of Ljubljana)
- *Combining Structural and Statistical Approach to Online Recognition of Handwritten Mathematical Formulas*
Jan Stria, Daniel Prusa, CMP, Vaclav Hlavac (CMP, CTU Prague)
- *Using discriminative analysis for improving hierarchical compositional models*
Domen Tabernik, Matej Kristan, Marko Boben, Ales Leonardis (University of Ljubljana; University of Birmingham)

15:45 - 16:15 Coffee Break

16:15 - 17:15 Visit of Pilgrimage Church of the Virgin Mary

17:15 - 18:15 **Invited Talk: Prof. Dr. Helmut Pottmann - Shape Space Exploration**

18:15 - 19:00 **Oral Session 2: 3D Computer Vision**

- *Locally Rigid RGB-D Scene Flow*
Michael Hornacek, Andrew Fitzgibbon, Margrit Gelautz, Carsten Rother (TU Vienna; Microsoft Research Cambridge; Dresden University of Technology)
- *Active Monocular Localization: Towards Autonomous Monocular Exploration for Multirotor MAVs*
Christian Mostegel, Andreas Wendel, Horst Bischof (TU Graz)

19:15 - 21:00 Dinner

21:00 - Socializing

Tuesday, February 4th

07:00 - 09:00 Breakfast

09:00 - 09:45 **Oral Session 3: Face and gesture**

- *Joint head pose estimation and detection of facial landmarks*
Jan Cech, Vojtech Franc, Jiri Matas (CMP, CTU Prague)
- *CLandmark --- The General Landmarking Library*
Michal Uříčář, Vojtech Franc, Václav Hlaváč (CMP, CTU Prague)

09:45 - 10:30 Oral Session 4: Optimization

- *Interval Insensitive Loss for Ordinal Classification*
Kostiantyn Antoniuk, Vojtech Franc, Václav Hlaváč (CMP, CTU Prague)
- *A bi-level view of inpainting - based image compression*
Yunjin Chen, René Ranftl, Tomas Pock (TU Graz)

10:30 - 10:45 Coffee Break

10:45 - 11:45 **Invited Talk: Ivan Laptev - Recent trends and future challenges in action recognition**

11:45 - 13:15 Lunch

13:15 - 14:00 Walk to the Cave

14:00 - 15:30 Cave Výpustek

15:30 - 16:00 Walk from the cave

16:30 - 17:15 **Oral Session 5: Low-level vision and image processing**

- *Evaluation of performance of smart mobile devices in machine vision tasks*
Danijel Skocaj, Domen Tabernik, Domen Racki, Matjaz Hegedic, Alen Vrecko, Matej Kristan (University of Ljubljana)
- *A Few Things One Should Know About Feature Extraction, Description and Matching*
Karel Lenc, Jiri Matas, Dmytro Mishkin (CMP, CTU Prague)

17:15 - 17:45 Coffee Break

17:45 - 18:00 Poster Spotlights

18:00 - 19:30 **Poster Session**

- *Recognition System for On-line Sketched Diagrams*
Martin Bresler, Truyen Phan, Daniel Prusa, Václav Hlaváč, Masaki Nakagawa (CMP, CTU Prague; TUAT)
- *Efficient Texture-based Descriptor for Fluorescence Microscopy Images of HEP-2 Cells*
Tomas Majtner, Roman Stoklasa, David Svoboda (Masaryk University Brno)
- *A Novel Fuzzy C-Means Based Defuzzification Approach with an Adapted Minkowski Distance*
Abder-Rahman Ali, Adélaïde Albouy-Kissi, Antoine Vacavant, Manuel Grand-brochie, Jean-Yves Boire (University of Auvergne)
- *Normal Estimation from Affine Transformation between Calibrated Stereo Images*
Daniel Barath, Levente Hajder, József Molnár, (MTA SZTAKI; University of Szeged)
- *Detecting handwritten signatures in scanned documents*
Hasan Ogul, Ilkhan Cuceloglu (Baskent University)

- *Reeb graph based examination of root development*
Ines Janusch, Walter Kropatsch, Wolfgang Busch (TU Wien; Gregor Mendel Institut)
- *jSLIC: superpixels in ImageJ*
Jiří Borovec, Jan Kybic (CMP, CTU Prague)

20:00 - 22:00 Workshop Dinner

22:00 - Socializing

Wednesday, February 5th

07:00 - 09:00 Breakfast

09:00 - 10:30 Oral Session 6: Motion & tracking + Video & Surveillance

- *The VOT2013 challenge: overview and additional results*
Matej Kristan, Roman Pflugfelder, Ales Leonardis, Jiri Matas, Fatih Porikli, Luka Cehovin, Georg Nebehay, Gustavo Dominguez Fernandez, Tomáš Vojir, (University of Ljubljana; Austrian Institute of Technology; CMP, CTU Prague; NICTA and Australian National University)
- *Pedestrian Recognition and Localisation in Image Sequences as Bayesian Inference*
Tobias Klinger, Franz Rottensteiner, Christian Heipke, (Institute of Photogrammetry, Hannover)
- *Violent Scenes Detection based on Automatically-generated Mid-level Violent Concepts*
Shinichi Goto, Terumasa Aoki (Tohoku University)
- *Mobile low-angle off-axis camera traffic monitoring system*
Šimon Fojtů, Martin Bresler, Daniel Prusa, Karel Zimmermann, Tomas Pajdla, Václav Hlaváč (CMP, CTU Prague)

10:30 - 11:00 Coffee Break

11:00 - 12:00 Oral Session 7: Segmentation, grouping and shape representation

- *Canonical Encoding of the Combinatorial Pyramid*
Fuensanta Garcia Torres, Walter Kropatsch, (PRIP, TU Wien)
- *Over-Segmentation of 3D Medical Image Volumes*
Markus Holzer (Medical University of Vienna)
- *On the Geometry of Co-planar Repeated Patterns*
James Pritts, Ondrej Chum, Jiri Matas (CMP, CTU Prague)

12:00 - 12:15 Closing & CVWW 2015

12:30 - 14:30 Lunch