

## Contents – Part II

### Poster Session 1 (*continued*)

Multi-view Geometry Compression . . . . .	3
<i>Siyu Zhu, Tian Fang, Runze Zhang, and Long Quan</i>	
Camera Calibration Based on the Common Self-polar Triangle of Sphere Images . . . . .	19
<i>Haifei Huang, Hui Zhang, and Yiu-ming Cheung</i>	
Multi-scale Tetrahedral Fusion of a Similarity Reconstruction and Noisy Positional Measurements. . . . .	30
<i>Runze Zhang, Tian Fang, Siyu Zhu, and Long Quan</i>	
DEPT: Depth Estimation by Parameter Transfer for Single Still Images . . . . .	45
<i>Xiu Li, Hongwei Qin, Yangang Wang, Yongbing Zhang, and Qionghai Dai</i>	
Object Ranking on Deformable Part Models with Bagged LambdaMART . . . . .	59
<i>Chaobo Sun, Xiaojie Wang, and Peng Lu</i>	
Representation Learning with Smooth Autoencoder . . . . .	72
<i>Kongming Liang, Hong Chang, Zhen Cui, Shiguang Shan, and Xilin Chen</i>	
Single Image Smoke Detection . . . . .	87
<i>Hongda Tian, Wanqing Li, Philip Ogunbona, and Lei Wang</i>	
Adaptive Sparse Coding for Painting Style Analysis . . . . .	102
<i>Zhi Gao, Mo Shan, Loong-Fah Cheong, and Qingquan Li</i>	
Efficient Image Detail Mining . . . . .	118
<i>Andrej Mikulík, Filip Radenović, Ondřej Chum, and Jiří Matas</i>	
Accuracy and Specificity Trade-off in $k$ -nearest Neighbors Classification . . . . .	133
<i>Luis Herranz and Shuqiang Jiang</i>	
Multi-view Point Cloud Registration Using Affine Shape Distributions . . . . .	147
<i>Jia Du, Wei Xiong, Wenyu Chen, Jierong Cheng, Yue Wang, Ying Gu, and Shue-Ching Chia</i>	
Part Detector Discovery in Deep Convolutional Neural Networks . . . . .	162
<i>Marcel Simon, Erik Rodner, and Joachim Denzler</i>	
Performance Evaluation of 3D Local Feature Descriptors . . . . .	178
<i>Yulan Guo, Mohammed Bennamoun, Ferdous Sohel, Min Lu, Jianwei Wan, and Jun Zhang</i>	

Scene Text Detection Based on Robust Stroke Width Transform and Deep Belief Network . . . . .	195
<i>Hailiang Xu, Like Xue, and Feng Su</i>	
Cross-Modal Face Matching: Beyond Viewed Sketches . . . . .	210
<i>Shuxin Ouyang, Timothy Hospedales, Yi-Zhe Song, and Xueming Li</i>	
3D Aware Correction and Completion of Depth Maps in Piecewise Planar Scenes . . . . .	226
<i>Ali K. Thabet, Jean Lahoud, Daniel Asmar, and Bernard Ghanem</i>	
Regularity Guaranteed Human Pose Correction . . . . .	242
<i>Wei Shen, Rui Lei, Dan Zeng, and Zhijiang Zhang</i>	
Accelerated Kmeans Clustering Using Binary Random Projection . . . . .	257
<i>Yukyung Choi, Chaehoon Park, and In So Kweon</i>	
Divide and Conquer: Efficient Large-Scale Structure from Motion Using Graph Partitioning . . . . .	273
<i>Brojeshwar Bhowmick, Suvam Patra, Avishek Chatterjee, Venu Madhav Govindu, and Subhashis Banerjee</i>	
A Homography Formulation to the 3pt Plus a Common Direction Relative Pose Problem . . . . .	288
<i>Olivier Saurer, Pascal Vasseur, Cedric Demonceaux, and Friedrich Fraundorfer</i>	
MoDeep: A Deep Learning Framework Using Motion Features for Human Pose Estimation . . . . .	302
<i>Arjun Jain, Jonathan Tompson, Yann LeCun, and Christoph Bregler</i>	
Accelerating Cost Volume Filtering Using Salient Subvolumes and Robust Occlusion Handling . . . . .	316
<i>Mohamed A. Helala and Faisal Z. Qureshi</i>	
3D Human Pose Estimation from Monocular Images with Deep Convolutional Neural Network . . . . .	332
<i>Sijin Li and Antoni B. Chan</i>	
Plant Leaf Identification via a Growing Convolution Neural Network with Progressive Sample Learning . . . . .	348
<i>Zhong-Qiu Zhao, Bao-Jian Xie, Yiu-ming Cheung, and Xindong Wu</i>	
Understanding Convolutional Neural Networks in Terms of Category-Level Attributes . . . . .	362
<i>Makoto Ozeki and Takayuki Okatani</i>	

Robust Scene Classification with Cross-Level LLC Coding  
on CNN Features . . . . . 376  
*Zequn Jie and Shuicheng Yan*

A Graphical Model for Rapid Obstacle Image-Map Estimation  
from Unmanned Surface Vehicles . . . . . 391  
*Matej Kristan, Janez Perš, Vildana Sulič, and Stanislav Kovačič*

On the Performance of Pose-Based RGB-D Visual Navigation Systems . . . . . 407  
*Dominik Belter, Michał Nowicki, and Piotr Skrzypczyński*

Elastic Shape Analysis of Boundaries of Planar Objects with Multiple  
Components and Arbitrary Topologies . . . . . 424  
*Sebastian Kurtek, Hamid Laga, and Qian Xie*

**3D Vision**

A Minimal Solution to Relative Pose with Unknown Focal Length  
and Radial Distortion. . . . . 443  
*Fangyuan Jiang, Yubin Kuang, Jan Erik Solem, and Kalle Åström*

Simultaneous Entire Shape Registration of Multiple Depth Images  
Using Depth Difference and Shape Silhouette. . . . . 457  
*Takuya Ushinohama, Yosuke Sawai, Satoshi Ono, and Hiroshi Kawasaki*

Joint Camera Pose Estimation and 3D Human Pose Estimation  
in a Multi-camera Setup. . . . . 473  
*Jens Puwein, Luca Ballan, Remo Ziegler, and Marc Pollefeys*

Singly-Bordered Block-Diagonal Form for Minimal Problem Solvers. . . . . 488  
*Zuzana Kukelova, Martin Bujnak, Jan Heller, and Tomáš Pajdla*

Stereo Fusion Using a Refractive Medium on a Binocular Base . . . . . 503  
*Seung-Hwan Baek and Min H. Kim*

**Low-Level Vision and Features**

Saliency Detection via Nonlocal  $L_0$  Minimization . . . . . 521  
*Yiyang Wang, Risheng Liu, Xiaoliang Song, and Zhixun Su*

$N^4$ -Fields: Neural Network Nearest Neighbor Fields  
for Image Transforms . . . . . 536  
*Yaroslav Ganin and Victor Lempitsky*

Super-Resolution Using Sub-Band Self-Similarity . . . . . 552  
*Abhishek Singh and Narendra Ahuja*

Raindrop Detection and Removal from Long Range Trajectories. . . . .	569
<i>Shaodi You, Robby T. Tan, Rei Kawakami, Yasuhiro Mukaigawa, and Katsushi Ikeuchi</i>	
Interest Points via Maximal Self-Dissimilarities. . . . .	586
<i>Federico Tombari and Luigi Di Stefano</i>	
Improving Local Features by Dithering-Based Image Sampling. . . . .	601
<i>Christos Varytimidis, Konstantinos Rapantzikos, Yannis Avrithis, and Stefanos Kollias</i>	
<b>Poster Session 2</b>	
Sparse Kernel Learning for Image Set Classification . . . . .	617
<i>Muhammad Uzair, Arif Mahmood, and Ajmal Mian</i>	
Automatic Feature Learning to Grade Nuclear Cataracts Based on Deep Learning . . . . .	632
<i>Xinting Gao, Stephen Lin, and Tien Yin Wong</i>	
Texture Classification Using Dense Micro-block Difference (DMD) . . . . .	643
<i>Rakesh Mehta and Karen Egiazarian</i>	
Nuclear- $L_1$ Norm Joint Regression for Face Reconstruction and Recognition . . . . .	659
<i>Lei Luo, Jian Yang, Jianjun Qian, and Ying Tai</i>	
Segmentation of X-ray Images by 3D-2D Registration Based on Multibody Physics . . . . .	674
<i>Jérôme Schmid and Christophe Chênes</i>	
View-Adaptive Metric Learning for Multi-view Person Re-identification . . . .	688
<i>Canxiang Yan, Shiguang Shan, Dan Wang, Hao Li, and Xilin Chen</i>	
<b>Author Index</b> . . . . .	703



<http://www.springer.com/978-3-319-16807-4>

Computer Vision -- ACCV 2014

12th Asian Conference on Computer Vision, Singapore,

Singapore, November 1-5, 2014, Revised Selected

Papers, Part II

Cremers, D.; Reid, I.; Saito, H.; Yang, M.-H. (Eds.)

2015, XX, 709 p. 346 illus., Softcover

ISBN: 978-3-319-16807-4