

GCPR 2019
Accepted papers and tentative schedule

Oral Session I: Image Processing and Analysis
(Wednesday, September 11, 10:50 – 12:30)

- Learned Collaborative Stereo Refinement
Patrick Knöbelreiter, Thomas Pock
- Plane Completion and Filtering for Multi-View Stereo Reconstruction ...
Andreas Kuhn, Shan Lin, Oliver Erdler
- Simultaneous Semantic Segmentation and Outlier Detection in Presence
of Domain Shift
Petra Bevandić, Ivan Krešo, Marin Oršić, Siniša Šegvić
- 3D Bird’s-Eye-View Instance Segmentation
*Cathrin Elich, Francis Engelmann, Theodora Kontogianni, Bastian
Leibe*
- Classification-Specific Parts for Improving Fine-Grained Visual
Categorization
Dimitri Korsch, Paul Bodesheim, Joachim Denzler

Oral Session II: Imaging Techniques, Image Analysis
(Wednesday, September 11, 15:30 – 16:50)

- Adjustment and Calibration of Dome Port Camera Systems for
Underwater Vision
Mengkun She, Yifan Song, Jochen Mohrmann, Kevin Köser
- Training Auto-Encoder-Based Optimizers for Terahertz Image
Reconstruction
*Tak Ming Wong, Matthias Kahl, Peter Haring-Bollívar, Andreas
Kolb, Michael Möller*
- Joint Viewpoint and Keypoint Estimation with Real and Synthetic Data .
Pau Panareda Busto, Juergen Gall
- Non-Causal Tracking by Deblatting
Denys Rozumnyi, Jan Kotera, Filip Šroubek, Jiří Matas

Oral Session III: Learning
(Thursday, September 12, 11:30 – 12:30)

- Group Pruning using a Bounded- l_p norm for Group Gating and
 Regularization
*Chaithanya Kumar Mummadi, Tim Genewein, Dan Zhang, Thomas
 Brox, Volker Fischer*
- On the Estimation of the Wasserstein Distance in Generative Models
Thomas Pinetz, Daniel Soukup, Thomas Pock
- Deep Archetypal Analysis
*Sebastian Mathias Keller, Maxim Samarin, Mario Wieser, Volker
 Roth*

Oral Session IV: Image Analysis, Applications
(Thursday, September 12, 15:30 – 16:50)

- Single Level Feature-to-Feature Forecasting with Deformable Convolutions
*Josip Šarić, Marin Oršić, Tonći Antunović, Sacha Vražić, Siniša
 Šegvić*
- Predicting Landscapes from Environmental Conditions Using
 Generative Networks
*Christian Requena-Mesa, Markus Reichstein, Miguel Mahecha,
 Basil Kraft, Joachim Denzler*
- Semi-Supervised Segmentation of Salt Bodies in Seismic Images using
 an Ensemble of Convolutional Neural Networks
Yauhen Babakhin, Artsiom Sanakoyeu, Hirotohi Kitamura
- Entrack: A Data-Driven Maximum-Entropy Approach to Fiber
 Tractography
Viktor Wegmayr, Giacomo Giuliani, Joachim M. Buhmann

Poster Session I
(Wednesday, September 11, 14:00 – 15:30)

- Generative Aging of Brain MR-Images and Prediction of Alzheimer
 Progression
Viktor Wegmayr, Maurice Hörold, Joachim M. Buhmann
- Nonlinear Causal Link Estimation under Hidden Confounding with an
 Application to Time Series Anomaly Detection
*Violeta Teodora Trifunov, Maha Shadaydeh, Jakob Runge, Veronika
 Eyring, Markus Reichstein, Joachim Denzler*

Iris Verification with Convolutional Neural Network and Unit-Circle Layer <i>Radim Špetlík, Ivan Razumenić</i>	
SDNet: Semantically Guided Depth Estimation Network	
<i>Matthias Ochs, Adrian Kretz, Rudolf Mester</i>	
Object Segmentation using Pixel-wise Adversarial Loss	
<i>Ricard Durall, Franz-Josef Pfreundt, Ullrich Köthe, Janis Keuper</i>	
Visual Coin-Tracking: Tracking of Planar Double-Sided Objects	
<i>Jonáš Šerých, Jiří Matas</i>	
Exploiting Attention for Visual Relationship Detection	
<i>Tongxin Hu, Wentong Liao, Michael Ying Yang, Bodo Rosenhahn</i>	
Learning Task-Specific Generalized Convolutions in the Permutohedral Lattice	
<i>Anne S. Wannenwetsch, Martin Kiefel, Peter V. Gehler, Stefan Roth</i>	
Achieving Generalizable Robustness of Deep Neural Networks by Stability Training	
<i>Jan Laermann, Wojciech Samek, Nils Strodthoff</i>	

Poster Session II (Thursday, September 12, 10:00 – 11:30)

2D and 3D Segmentation of Uncertain Local Collagen Fiber Orientations in SHG Microscopy	
<i>Lars Schmarje, Claudius Zelenka, Ulf Geisen, Claus-C. Glüer, Reinhard Koch</i>	
Points2Pix: 3D Point-Cloud to Image Translation using conditional GANs <i>Stefan Milz, Martin Simon, Kai Fischer, Maximilian Pöpperl, Horst-Michael Gross</i>	
MLAttack: Fooling Semantic Segmentation Networks by Multi-Layer Attacks	
<i>Puneet Gupta, Esa Rahtu</i>	
Not Just a Matter of Semantics: The Relationship between Visual and Semantic Similarity	
<i>Clemens-Alexander Brust, Joachim Denzler</i>	
DynGraph: Visual Question Answering via Dynamic Scene Graphs	
<i>Monica Haurilet, Ziad Al-Halah, Rainer Stiefelhagen</i>	
Training Invertible Neural Networks as Autoencoders	
<i>The-Gia Leo Nguyen, Lynton Ardizzone, Ullrich Köthe</i>	

- Weakly Supervised Learning of Dense Semantic Correspondences and Segmentation
Nikolai Ufer, Kam To Lui, Katja Schwarz, Paul Warkentin, Björn Ommer
- A Neural-Symbolic Architecture for Inverse Graphics Improved by Lifelong Meta-Learning
Michael Kissner, Helmut Mayer
- Unsupervised Multi-Source Domain Adaptation Driven by Deep Adversarial Ensemble Learning
Sayan Rakshit, Biplab Banerjee, Gemma Roig, Subhasis Chaudhuri

**Poster Session III
(Friday, September 13, 10:30 – 12:00)**

- Time-Frequency Causal Inference Uncovers Anomalous Events in Environmental Systems
Maha Shadaydeh, Joachim Denzler, Yanira Guanche García, Miguel Mahecha
- Tongue Contour Tracking in Ultrasound Images With Spatiotemporal LSTM Networks
Enes Aslan, Yusuf Sinan Akgul
- Localized Interactive Instance Segmentation
Soumajit Majumder, Angela Yao
- Iterative Greedy Matching for 3D Human Pose Tracking from Multiple Views
Julian Tanke, Juergen Gall
- Visual Person Understanding through Multi-Task and Multi-Dataset Learning
Kilian Pfeiffer, Alexander Hermans, István Sárádi, Mark Weber, Bastian Leibe
- Dynamic Classifier Chains for Multi-Label Learning
Pawel Trajdos, Marek Kurzynski
- Learning 3D Semantic Reconstruction on Octrees
Xiaojuan Wang, Martin R. Oswald, Ian Cherabier, Marc Pollefeys
- Learning to Disentangle Latent Physical Factors for Video Prediction
Deyao Zhu, Marco Munderloh, Bodo Rosenhahn, Jörg Stückler
- Learning to Train with Synthetic Humans
David T. Hoffmann, Dimitrios Tzionas, Michael J. Black, Siyu Tang