

<b>Monday, 12/Sep/2016</b>	<b>WORKSHOP</b>
<b>9:00am-18:00pm</b>	<b>Workshop - New Challenges in Neural Computation (NC<sup>2</sup>)</b>
9:00am	Opening
9:05am-10:00am	<p><b><u>Advances in learning vector quantization</u></b>  <b>Classification Margin Dependent Exploration Horizons of Prototypes for Outlier Robust Classification in Learning Vector Quantization</b>  T. Villmann, M. Kaden, A. Bohnsack</p> <p><b>Linear Supervised Transfer Learning for Generalized Matrix LVQ</b>  B. Paassen, A. Schulz, B. Hammer</p> <p><b>Relevance Learning Vector Quantization in Variable Dimensional Spaces</b>  K. Bunte, E. S. Baranowski, W. Arlt, P. Tino</p>
10:00am-11:00am	<p><b><u>Processing time series data</u></b>  <b>Parameterized Pattern Generation via Regression in the Model Space of Echo State Networks</b>  F. Melchert, U. Seiffert, M. Biehl, W. Aswolinskiy, J. Steil</p> <p><b>Symbolic Association Learning inspired by the Symbol Grounding Problem</b>  F. Raue, M. Liwicki, A. Dengel</p>
11:00am-11:30am	Coffee break
11:30am-12:30pm	<p><b><u>Keynote talk</u></b>  <b>Representation Learning – I’ve heard that one before</b>  Marc Toussaint (University of Stuttgart)</p>
12:30pm-2:00pm	Lunch Break
2:00pm-3:00pm	<p><b><u>Keynote talk</u></b>  <b>Neural Simpletrons – Minimalistic Deep Neural Networks for Probabilistic with Few Labels</b>  Jörg Lücke (University of Oldenburg)</p>
3:00pm-4:00pm	<p><b><u>Sampling, modelling, and optimization</u></b>  <b>Unsupervised Word Discovery from Speech using Bayesian Hierarchical Models</b>  O. Walter, R. Häb-Umbach</p> <p><b>Goal Babbling with Direction Sampling for simultaneous exploration and learning of inverse kinematics of a humanoid robot</b>  R. Rayyes, J. Steil</p> <p><b>Virtual optimisation for improved production planning</b>  J. Brinkrolf, T. Mittag, R. Joppen, A. Dröge, K.-H. Pietsch, B. Hammer</p>
4:00pm-4:30pm	Coffee break
4:30pm-5:40pm	<p><b><u>Computer vision and deep learning</u></b>  <b>The Artificial Mind's Eye - Resisting Adversarials for Convolutional Neural Networks using Internal Projection</b>  H. Berntsen, W. Kuijper, T. Heskes</p> <p><b>Handcrafting vs Deep Learning: An Evaluation of NTraj+ Features for Pose Based Action Recognition</b>  M. Garbade, J. Gall</p>

	<b>Prediction for a Road Detection System</b> J. Kreger, L. Fischer, U. Bauer-Wersing, T. Weisswange <b>Quality</b> <b>Object Detection Based on Deep Learning and Context Information</b> P. P. Fouopi, G. Srinivas, S. Knake-Langhorst, F. Köster
5:40pm-5:50pm	Nomination of the best presentation award, closing
5:50pm-6:30pm	Meeting of the GI Fachgruppe Neural Networks

<b>Monday, 12/Sep/2016</b>	<b>TUTORIALS</b>
<b>09:00am-12:00pm</b>	<b>Tutorial - Embeddings and Metric Learning</b>
09:00am-09:45am	<u><b>Embeddings</b></u> Talk by Zeynep Akata
09:45am-10:00am	Break
10:00am-11:00am	<u><b>Applications of Embeddings</b></u> Talk by Zeynep Akata (Max Planck Institute for Informatics, Saarbrücken) Practical Session by Yongqin Xian (Max Planck Institute for Informatics, Saarbrücken)
11:00am-11:15am	Coffee break
11:15am-12:00pm	<u><b>Metric Learning</b></u>
<b>2:00pm-6:00pm</b>	<b>Tutorial – NVIDIA</b>
	<ul style="list-style-type: none"> <li>- General Overview of natural Networks</li> <li>- Deep Natural Networks</li> <li>- Convolutional Neural Networks</li> <li>- The benefit of GPUs for DNN</li> <li>- Frameworks for deep learning on GPUs</li> <li>- Introduction to Caffe</li> <li>- Hands-on examples doing Digit Recognition</li> </ul>
07:00pm	<b>Icebreaker</b>

<b>Tuesday, 13/Sep/2016</b>	
8:15am	Registration
9:00am	Opening
09:20am-10:00am	German Pattern Recognition Award
10:00am-11:00am	Chair:
	<p><b><u>10:00am-10:30am</u></b>  <b>Precise and Robust Line Detection for Highly Distorted and Noisy Images</b>  Dominik Wolters (Kiel University) and Reinhard Koch (Universität Kiel)</p> <p><b><u>10:30am-11:00am</u></b>  <b>Pixel-level Encoding and Depth Layering for Instance-level Semantic Segmentation</b>  Jonas Uhrig (Daimler AG), Marius Cordts (Daimler AG, TU Darmstadt), Uwe Franke (Daimler AG), Thomas Brox (University of Freiburg)</p>
11:00am-11:30am	Coffee break
11:30am-12:30pm	Chair:
	<p><b><u>11:30am-12:00pm</u></b>  <b>Artistic style transfer for videos</b>  Manuel Ruder (University of Freiburg), Alexey Dosovitskiy (University of Freiburg), Thomas Brox (University of Freiburg)</p> <p><b><u>12:00pm-12:30pm</u></b>  <b>Semantically Guided Depth Upsampling</b>  Nick Schneider (Daimler AG), Lukas Schneider (Daimler AG), Peter Pinggera (Daimler), Marc Pollefeys (ETH Zurich), Uwe Franke (Daimler AG), Christoph Stiller (Karlsruhe Institute of Technology)</p>
12:30pm-2:00pm	Lunch
2:00pm-3:00pm	<p><b><u>Invited Talk 1</u></b>  <b>Atomic-resolution multiview reconstruction using Cryo-EM</b>  David Fleet (University of Toronto)</p>
3:00pm-4:00pm	Chair:
	<p><b><u>3:00pm-3:30pm</u></b>  <b>Chimpanzee Faces in the Wild: Log-Euclidean CNNs for Predicting Identities and Attributes of Primates</b>  Alexander Freytag (Computer Vision Group Jena), Erik Rodner (Computer Vision Group Jena), Marcel Simon (Computer Vision Group Jena), Alexander Loos (Fraunhofer IDMT), Hjalmar Kuehl (MPI Evolutionary Anthropology), Joachim Denzler (University of Jena)</p> <p><b><u>3:30pm-4:00pm</u></b>  <b>Convolutional scale invariance for semantic segmentation</b>  Ivan Krešo (University of Zagreb), Denis Čaušević (University of Zagreb), Josip Krapac (University of Zagreb), Siniša Šegvić (University of Zagreb)</p>
4:00pm-4:30pm	Coffee break
4:30pm-5:30pm	Chair:

	<p><b><u>4:30pm-5:00pm</u></b> <b>Convexification of Learning from Constraints</b> Iaroslav Shcherbatyi (Max Planck Institute for Informatics), Björn Andres (Max Planck Institute for Informatics)</p> <p><b><u>5:00pm-5:30pm</u></b> <b>FSI Schemes: Fast Semi-Iterative Solvers for PDEs and Optimisation Methods</b> David Hafner (Saarland University), Peter Ochs (Saarland University), Joachim Weickert (Saarland University), Martin Reißel (FH Aachen), Sven Grewenig (Saarland University)</p>
5:30pm-8:00pm	DAGM e.V. Meeting

<b>Wednesday, 14/Sep/2016</b>	
09:00am-10:00am	<b><u>Invited Talk 2</u></b> <b>Image compression, processing, and machine learning</b> Thomas Wiegand (Heinrich Hertz Institut Berlin)
10:00am-11:00am	Poster Session (1) / Nectar Track (1)
11:00am-11:30am	Poster Session 1 + Coffee Break
11:30am-12:30pm	Chair:
	<b><u>11:30am-12:00pm</u></b> <b>Automated Segmentation of Immunostained Cell Nuclei in 3D Ultramicroscopy Images</b> Aaron Scherzinger (University of Muenster), Florian Kleene (University of Muenster), Cathrin Dierkes (Max Planck Institute for Molecular Biomedicine), Friedemann Kiefer (Max Planck Institute for Molecular Biomedicine), Klaus Hinrichs (University of Muenster), Xiaoyi Jiang (Münster University) <b><u>12:00pm-12:30pm</u></b> <b>Robust Interactive Multi-label Segmentation with an Advanced Edge Detector</b> Sabine Müller (Saarland University), Peter Ochs (Saarland University), Joachim Weickert (Saarland University), Norbert Graf (Saarland University Hospital)
12:30pm-2:00pm	Lunch
2:00pm-4:00pm	Chair:
	<b><u>2:00pm-2:30pm</u></b> <b>Contiguous Patch Segmentation in Pointclouds</b> William Nguatem (Bundeswehr University Munich), Helmut Mayer (Bundeswehr University Munich) <b><u>2:30pm-3:00pm</u></b> <b>Randomly Sparsified Synthesis for Model-based Deformation Analysis</b> Stefan Reinhold (Christian-Albrechts University), Andreas Jordt (University of Kiel, Department of Computer Science), Reinhard Koch (Universität Kiel) <b><u>3:00pm-3:30pm</u></b> <b>Depth Map based Facade Abstraction from Noisy Multi-View Stereo Point Clouds</b> Andreas Ley (Technische Universität Berlin), Olaf Hellwich (TU Berlin) <b><u>3:30pm-4:00pm</u></b> <b>Stereo Visual Odometry without Temporal Filtering</b> Joerg Deigmoeller (Honda Research Institute EU), Julian Eggert (Honda Research Institute Europe)
4:00pm-4:30pm	Coffee Break 2 + Poster Session 2
4:30pm-5:30pm	Poster Session (2) / Nectar Track (2)
7:00pm	GCPR-Dinner

Poster Session	No.	Poster	Author
1	48	Discrete Tomography by Continuous Multilabeling Subject to Projection Constraints	Matthias Zisler (Heidelberg University, IPA), Stefania Petra (Heidelberg University, IPA Group), Claudius Schnörr (Hochschule München, CORSSNAV), Christoph Schnörr (University of Heidelberg)
1	52	Reduction of Point Cloud Artifacts Using Shape Priors Estimated with the Gaussian Process Latent Variable Model	Jens Krenzin (TU Berlin), Olaf Hellwich (TU Berlin)
1	54	Camera-Agnostic Monocular SLAM and Semi-Dense 3D Reconstruction	Martin Rünz (University College London), Frank Neuhaus (Universität Koblenz-Landau), Christian Winkens (Universität Koblenz-Landau), Dietrich Paulus (University of Koblenz-Landau)
1	55	Efficient Single-view 3D Co-segmentation using Shape Similarity and Spatial Part Relations	Nikita Araslanov (University of Bonn), Seongyong Koo (University of Bonn), Jürgen Gall (University of Bonn), Sven Behnke (University of Bonn)
1	63	Fast and accurate micro lenses depth maps for multi-focus light field cameras	Nuno Goncalves (University of Coimbra), Rodrigo Ferreira (Institute of Systems and Robotics - University of Coimbra)
1	71	Train Detection and Tracking in Optical Time Domain Reflectometry (OTDR) Signals	Adam Papp (AIT), Christoph Wiesmeyr (AIT), Martin Litzenberger (AIT), Heinrich Garn (AIT), Walter Kropatsch (Vienna University of Technology)
1	83	Parametric Dictionary-Based Velocimetry for Echo PIV	Ecaterina Bodnariuc (Heidelberg University), Stefania Petra (Heidelberg University, IPA Group), Christian Poelma (Delft University of Technology), Christoph Schnörr (University of Heidelberg)
1	85	Identifying individual facial expressions by deconstructing a neural network	Farhad Arbabzadah (Technische Universität Berlin), Grégoire Montavon (Technische Universität Berlin), Klaus-Robert Müller (Technische Universität Berlin), Wojciech Samek (Fraunhofer HHI)

Poster Session	Publ.	Poster	Author
<b>NECTAR Track 1</b>	ICCV	Neural Activation Constellations: Unsupervised Part Model Discovery with Convolutional Networks	Marcel Simon and Erik Rodner (Friedrich Schiller University Jena)
<b>NECTAR Track 1</b>	CVPR	Multicamera calibration from visible and mirrored epipoles	Andrey Bushnevskiy, Lorenzo Sorgi and Bodo Rosenhahn (TNT, Leibniz University of Hannover)
<b>NECTAR Track 1</b>	ICML (WS)	Maximally Divergent Intervals for Anomaly Detection.	Erik Rodner, Björn Barz, Yanira Guanache, Milan Flach, Miguel Mahecha, Paul Bodesheim, Markus Reichstein and Joachim Denzler (Friedrich Schiller University Jena)
<b>NECTAR Track 1</b>	TPami	3D Reconstruction of Human Motion from Monocular Image Sequences	Bastian Wandt, Hanno Ackermann, Bodo Rosenhahn (TNT, Leibniz University of Hannover)
<b>NECTAR Track 1</b>	CVPR	Temporal Action Detection using a Statistical Language Model	Alexander Richard and Juergen Gall (Bonn University)
<b>NECTAR Track 1</b>	ISRPS	Invariant descriptor learning using a Siamese convolutional neural network	Lin Chen, Franz Rottensteiner, Christian Heipke (IPI, Leibniz University of Hannover)
<b>NECTAR Track 1</b>	IV	Semantic Stixels: Depth is Not Enough	Lukas Schneider, Marius Cordts, Timo Rehfeld, David Pfeiffer, Markus Enzweiler, Uwe Franke, Marc Pollefeys, Stefan Roth (Daimler et.al.)
<b>NECTAR Track 1</b>	WACV	A survey on moving object detection for wide area motion imagery	Lars Wilko Sommer; Michael Teutsch; Tobias Schuchert; Jürgen Beyerer (IOSB Fraunhofer)
<b>NECTAR Track 1</b>	TPami	Human Pose estimation from Video and IMUs	Timo v. Marcard, Gerard Pons, Bodo Rosenhahn (TNT, Leibniz University of Hannover)
<b>NECTAR Track 1</b>	Percep-tion	Limitations of the Oriented Difference of Gaussian Filter in Special Cases of Brightness Perception Illusions	Ashish Bakshi, Sourya Roy, Arijit Mallick, Kuntal Ghosh (ISI Kolkata)

Poster Session	No.	Poster	Author
2	30	Boundary preserving variational image differentiation	Yosra Mathlouthi (INRS), Amar Mitiche (INRS), Ismail Ben Ayed (ETS)
2	60	A Prediction-Correction Approach for Real-Time Optical Flow Computation Using Stereo	Maxime Derome (ONERA), Aurélien Plyer (ONERA), Martial Sanfourche (ONERA), Guy Le Besnerais (ONERA)
2	65	Weakly-supervised semantic segmentation by redistributing region scores to pixels	Josip Krapac (University of Zagreb), Siniša Čegvić (University of Zagreb)
2	66	Fast Image Dehazing using Pixelwise Dark Channel Prior with Fast Guided Filter	Sung Yong Jo (POSTECH), Jeongmok Ha (POSTECH), Hong Jeong (POSTECH)
2	73	Learning a Confidence Measure for Real-time Egomotion Estimation	Stephanie Lessmann (Delphi Automotive), Jens Westerhoff (University of Wuppertal), Mirko Meuter (Delphi), Josef Pauli (University of Duisburg-Essen)
2	25	Learning to Select Long Track Features for Structure-From-Motion & Visual SLAM	Jonas Scheer (Intel Visual Computing Institute), Mario Fritz (MPI for Informatics), Oliver Grau (MPI for Informatics)
2	38	Source Localization of Reaction-Diffusion Models for Brain Tumors	Rym Jaroudi (Linköping University), George Baravdish (Linköping University), Freddie Astrom (Heidelberg University), Tomas B. Johansson (Linköping University)
2	80	Depth Estimation Through a Generative Model of Light Field Synthesis	Mehdi S. M. Sajjadi (Max Planck Institute for Intelligent Systems), Rolf Köhler (Max Planck Institute for Intelligent Systems), Bernhard Schölkopf (Max Planck Institute for Intelligent Systems), Michael Hirsch (Max Planck Institute for Intelligent Systems)
2	51	Coupling Convolutional Neural Networks and Hough Voting for Robust Segmentation of Ultrasound Volumes	Christine Kroll (Technische Universität München), fausto Milletari (Technische Universität München), Nassir Navab (Technische Universität München), Seyed-Ahmad Ahmadi (Ludwig-Maximilians-Universität München)



Poster Session	Publ.	Poster	Author
<b>NECTAR Track 2</b>	ECCV	Multi-view 3D Models from Single Images with a Convolutional Network	Maxim Tatarchenko, Alexey Dosovitskiy and Thomas Brox (Freiburg University)
<b>NECTAR Track 2</b>	CVPR	Manifold Span Reduction for Super Resolution	Eduardo Pérez-Pellitero, Jordi Salvador, Javier Ruiz-Hidalgo, Bodo Rosenhahn (Technicolor, TNT, Leibniz University of Hannover)
<b>NECTAR Track 2</b>	CVPR	Efficient Decomposition of Image and Mesh Graphs by Lifted Multicuts	Margret Keuper, Evgeny Levinkov, Nicolas Bonneel, Guillaume Lavoue, Thomas Brox, and Bjoern Andres (MPI for Informatics, Saarbruecken, et.al.)
<b>NECTAR Track 2</b>	EMMCVPR	Randomly Walking Can Get You Lost: Graph Segmentation with Unknown Edge Weights	H. Ackermann, B. Scheuermann, T.-J. Chin, B. Rosenhahn (Leibniz University of Hannover)
<b>NECTAR Track 2</b>	IEEE	Turbo Automatic Speech Recognition	Simon Receveur, Robin Weiß and Tim Fingscheidt (TU Braunschweig)
<b>NECTAR Track 2</b>	EGSR	Adaptive Image-Space Sampling for Gaze-Contingent Real-time Rendering	M. Stengel, S. Grogorick, M. Eisemann, M. Magnor (TU Braunschweig)
<b>NECTAR Track 2</b>	CVPR	The Cityscapes Dataset for Semantic Urban Scene Understanding	M. Cordts, M. Omran, S. Ramos, T. Rehfeld, M. Enzweiler, R. Benenson, U. Franke, S. Roth, and B. Schiele (Daimler et.al.)
<b>NECTAR Track 2</b>	WACV	A global-to-local framework for infrared and visible image sequence registration.	Michael Ying Yang, Yu Qiang, and Bodo Rosenhahn (TNT, Leibniz University of Hannover)
<b>NECTAR Track 2</b>	ICA	Lightweight, Non-invasive Collection of Steering Wheel Angles and Pedal Positions	Miriam Ruf, Jens Ziehn, Leonid German, Bodo Rosenhahn, Dieter Willersinn, Jürgen Beyerer, Heinrich Gotzig (IOSB Fraunhofer et.al.)
<b>NECTAR Track 2</b>	CVPR	Subgraph Decomposition for Multi-Target Tracking	Siyu Tang, Bjoern Andres, Micha Andriluka and Bernt Schiele (Max-Planck Institute for Computer Science)

<b>Thursday, 15/Sep/2016</b>	
9:00am-10:00am	<b><u>Invited Talk 3</u></b> <b>On visual Comparison</b> Patrik Perez (Technicolor)
10:00am-11:00am	Chair:
	<b><u>10:00am-10:30am</u></b> <b>Large-scale Active Learning with Approximated Expected Model Output Changes</b> Christoph Kaeding (Computer Vision Group Jena), Alexander Freytag (Computer Vision Group Jena), Erik Rodner (Computer Vision Group Jena), Andrea Perino (iDiv), Joachim Denzler (University of Jena) <b><u>10:30am-11:00am</u></b> <b>A Convnet for Non-Maximum Suppression</b> Jan Hosang (MPI-Inf), Rodrigo Benenson (MPI-Inf), Bernt Schiele (MPI for Informatics and Saarland University)
11:00am-11:30am	Coffee break
11:30am-12:30pm	Chair:
	<b><u>11:30am-12:00pm</u></b> <b>Occlusion-aware depth estimation using sparse light field coding</b> Ole Johannsen (University of Konstanz), Antonin Sulc (University of Konstanz), Bastian Goldlücke (University of Konstanz) <b><u>12:00pm-12:30pm</u></b> <b>Joint Object Pose Estimation and Shape Reconstruction in Urban Street Scenes Using 3D Shape Priors</b> Francis Engelmann (RWTH Computer Vision), Jörg Stückler (RWTH Aachen University), Bastian Leibe (RWTH Aachen University)
12:30pm-2:00pm	Lunch
2:00pm-3:00pm	Chair:
	<b><u>2:00pm-2:30pm</u></b> <b>Joint Recursive Monocular Filtering of Camera Motion and Disparity Map</b> Johannes Berger (Heidelberg University), Christoph Schnörr (University of Heidelberg) <b><u>2:30pm-3:00pm</u></b> <b>From Traditional to Modern: Domain Adaptation for Action Classification in Short Social Video Clips</b> Aditya Singh (IIIT-Hyderabad), Saurabh Saini (CVIT, IIIT-H), Rajvi Shah (IIIT-Hyderabad), P.J Narayanan (IIIT-Hyderabad)
3:00pm-3:30pm	Coffee Break + Award preparation
3:30pm- end	GCPR-Awards, Closing and Farewell