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

	Prediction for a Road Detection System J. Kreger, L. Fischer, U. Bauer-Wersing, T. Weisswange **Quality** **Object Detection Based on Deep Learning and Context Information** 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

Monday, 12/Sep/2016	**TUTORIALS**
09:00am-12:00pm	**Tutorial - Embeddings and Metric Learning**
09:00am-09:45am	**Embeddings** Talk by Zeynep Akata
09:45am-10:00am	Break
10:00am-11:00am	**Applications of Embeddings** Talk by Zeynep Akata (Max Planck Institute for Informatics, Saarbrucken) Practical Session by Yongqin Xian (Max Planck Institute for Informatics, Saarbrucken)
11:00am-11:15am	Coffee break
11:15am-12:00pm	**Metric Learning**
2:00pm-6:00pm	**Tutorial – NVIDIA**
	- General Overview of natural Networks - Deep Naturals Networks - Convolutional Neural Networks - The benefit of GPUs for DNN - Frameworks for deep learning on GPUs - Introduction to Caffe - Hands-on examples doing Digit Recognition
07:00pm	**Icebreaker**