Keywords: Deep Learning

List of Publications

2021

Journal Articles

[J1] P. Müller, V. Golkov, V. Tomassini and D. Cremers,
Rotation-Equivariant Deep Learning for Diffusion MRI,

Conference and Workshop Papers

[C1] F. Wimbauer, N. Yang, L. von Stumberg, N. Zeller and D Cremers,
MonoRec: Semi-Supervised Dense Reconstruction in Dynamic Environments
from a Single Moving Camera,

[C2] P. Müller, V. Golkov, V. Tomassini and D. Cremers,
Rotation-Equivariant Deep Learning for Diffusion MRI (short version),
International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting,
2021.

[C3] Y. Xia, Y. Xu, S. Li, R. Wang, J. Du, D. Cremers and U. Stilla,
SOE-Net: A Self-Attention and Orientation Encoding Network for Point Cloud
based Place Recognition,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021, Oral Pre-
sentation.

[C4] C Tomani, S Gruber, ME Erdem, D Cremers and F Buettner,
Post-hoc Uncertainty Calibration for Domain Drift Scenarios,
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021, Oral Pre-
sentation.

2020

Journal Articles

[J1] V. Golkov, A. Becker, D. T. Plop, D. 38;268uturilo, N. Davoudi, J. Mendenhall, R. Moretti, J. Meiler and D. Cremers,
Deep Learning for Virtual Screening: Five Reasons to Use ROC Cost Func-
tions,

[J2] G Fabbro, V Golkov, T Kemp and D Cremers,
Speech Synthesis and Control Using Differentiable DSP,

[J3] I Chiotellis and D Cremers,
Neural Online Graph Exploration,

Conference and Workshop Papers

and D. Cremers,
3D Deep Learning for Biological Function Prediction from Physical Fields,
Keywords: Deep Learning

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[C2] N. Yang, L. von Stumberg, R. Wang and D. Cremers,
D3VO: Deep Depth, Deep Pose and Deep Uncertainty for Monocular Visual Odometry,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020, *Oral Presentation*.

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Effective Version Space Reduction for Convolutional Neural Networks,
*European Conference on Machine Learning and Data Mining (ECML-PKDD)*, 2020.

[C4] L. von Stumberg, P. Wenzel, N. Yang and D. Cremers,
LM-Reloc: Levenberg-Marquardt Based Direct Visual Relocalization,

2019

Journal Articles

[J1] F. Pasa, V. Golkov, F. Pfeiffer, D. Cremers and D. Pfeiffer,
Efficient Deep Network Architectures for Fast Chest X-Ray Tuberculosis Screening and Visualization,

[J2] J. Schuchardt, V. Golkov and D. Cremers,
Learning to Evolve,

[J3] L. Della Libera, V. Golkov, Y. Zhu, A. Mielke and D. Cremers,
Deep Learning for 2D and 3D Rotatable Data: An Overview of Methods,

Conference and Workshop Papers

[C1] A. Vasilev, V. Golkov, M. Meissner, I. Lipp, E. Sgarlata, V. Tomassini, D. K. Jones and D. Cremers,
q-Space Novelty Detection with Variational Autoencoders,

[C2] P. Swazinna, V. Golkov, I. Lipp, E. Sgarlata, V. Tomassini, D. K. Jones and D. Cremers,
Negative-Unlabeled Learning for Diffusion MRI,

2018

Journal Articles

[J1] E. Aljalbout, V. Golkov, Y. Siddiqui, M. Strobel and D. Cremers,
Clustering with Deep Learning: Taxonomy and New Methods,

[J2] N. Mayer, E. Ilg, P. Fischer, C. Hazirbas, D. Cremers, A. Dosovitskiy and T. Brox,
What Makes Good Synthetic Training Data for Learning Disparity and Optical Flow Estimation?,
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 Deep Depth From Focus,
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 q-Space Deep Learning for Alzheimer’s Disease Diagnosis: Global Prediction and Weakly-Supervised Localization,

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 Precursor microRNA Identification Using Deep Convolutional Neural Networks,

[C4] P. Haeusser, J. Plapp, V. Golkov, E. Aljalbout and D. Cremers,
 Associative Deep Clustering - Training a Classification Network with no Labels,
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[C5] N. Yang, R. Wang, J. Stueckler and D. Cremers,
 Deep Virtual Stereo Odometry: Leveraging Deep Depth Prediction for Monocular Direct Sparse Odometry,
 European Conference on Computer Vision (ECCV), September 2018, Oral Presentation.

2017

Journal Articles

[J1] J. Kukacka, V. Golkov and D. Cremers,
 Regularization for Deep Learning: A Taxonomy,

Conference and Workshop Papers

[C1] F. Walch, C. Hazirbas, L. Leal-Taixe, T. Sattler, S. Hilsenbeck and D. Cremers,
 Image-based localization using LSTMs for structured feature correlation,

 Establishment of an interdisciplinary workflow of machine learning-based Radiomics in sarcoma patients,

[C3] P. Haeusser, A. Mordvintsev and D. Cremers,
 Learning by Association - A versatile semi-supervised training method for neural networks,
Keywords: Deep Learning

List of Publications


2016

Journal Articles


Conference and Workshop Papers


2015

Conference and Workshop Papers

[C2] A. Dosovitskiy, P. Fischer, E. Ilg, P. Haeusser, C. Hazirbas, V. Golkov, P. van der Smagt, D. Cremers and T. Brox,
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*IEEE International Conference on Computer Vision (ICCV)*, dec 2015.

[C3] F. Stark, C. Hazirbas, R. Triebel and D. Cremers,
CAPTCHA Recognition with Active Deep Learning,
*GCPR Workshop on New Challenges in Neural Computation*, Aachen, Germany, 2015.