Author: Triebel

List of Publications

Journal Publications

[J1] Hugo Grimmett, Rudolph Triebel, Rohan Paul and Ingmar Posner,  
Introspective classification for robot perception,  

[J2] L. Spinello, R. Triebel and R. Siegwart,  
Multiclass Multimodal Detection and Tracking in Urban Environments,  

Monte Carlo localization in outdoor terrains using multilevel surface maps,  

Supervised semantic labeling of places using information extracted from sensor data,  

[J5] P. Pfaff, R. Triebel and W. Burgard,  
An Efficient Extension to Elevation Maps for Outdoor Terrain Mapping and Loop Closing,  

[J6] H. Andreasson, R. Triebel and A. Lilienthal,  
Non-iterative Vision-based Interpolation of 3D Laser Scans,  

Publications at Conferences and Workshops

[C1] M. Sundermeyer, Z. Marton, M. Durner, M. Brucker and R. Triebel,  
Implicit 3D Orientation Learning for 6D Object Detection from RGB Images,  
September 2018, Best Paper Award.

[C2] M. Denninger and R. Triebel,  
Persistent Anytime Learning of Objects from Unseen Classes,  

[C3] I. Grixa, P. Schulz, W. Stürzl and R. Triebel,  
Appearance-Based Along-Route Localization for Planetary Missions,  

[C4] I. Chiotellis, F. Zimmermann, D. Cremers and R. Triebel,  
Incremental Semi-Supervised Learning from Streams for Object Classification,  

6DoF Pose Estimation for Industrial Manipulation based on Synthetic Data,  
International Symposium on Experimental Robotics (ISER), Buenos Aires, Argentina,  
Nov. 2018.


I. Chiotellis, R. Triebel, T. Windheuser and D. Cremers, Non-Rigid 3D Shape Retrieval via Large Margin Nearest Neighbor Embedding, October 2016.

S. Sharifzadeh, I. Chiotellis, R. Triebel and D. Cremers, Learning to Drive using Inverse Reinforcement Learning and Deep Q-Networks, NIPS Workshops, December 2016.


[C16] Y. Tao, R. Triebel and D. Cremers, 
Semi-supervised Online Learning for Efficient Classification of Objects in 3D Data Streams, 
2015.

[C17] 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.

[C18] T. Windheuser, M. Vestner, E. Rodola, R. Triebel and D. Cremers, 
Optimal Intrinsic Descriptors for Non-Rigid Shape Analysis, 
2014.

[C19] R. Triebel, J. Stühmer, M. Souiai and D. Cremers, 
Active Online Learning for Interactive Segmentation Using Sparse Gaussian Processes, 
German Conference on Pattern Recognition, 2014.

[C20] S. Debnath, S. S. Baishya, R. Triebel, V. Dutt and D. Cremers, 
Environment-adaptive Learning: How Clustering Helps to Obtain Good Training Data, 

Toward Automated Driving in Cities using Close-to-Market Sensors, 

[C22] H. Grimmett, R. Paul, R. Triebel and I. Posner, 
Knowing When We Don’t Know: Introspective Classification for Mission-Critical Decision Making, 

[C23] R. Triebel, H. Grimmett and I. Posner, 
Confidence Boosting: Improving the Introspectiveness of a Boosted Classifier for Efficient Learning, 

Introspective Active Learning for Scalable Semantic Mapping, 

Driven Learning for Driving: How Introspection Improves Semantic Mapping, 
The International Symposium on Robotics Research (ISRR), 2013.

Semantic Categorization of Outdoor Scenes with Uncertainty Estimates using Multi-Class Gaussian Process Classification, 
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[C28] J. Shin, R. Triebel and R. Siegwart,

[C29] J. Maye, R. Triebel, L. Spinello and R. Siegwart,

[C30] R. Kaestner, N. Engelhard, R. Triebel and R. Siegwart,

[C31] L. Spinello, R. Triebel, D. Vasquez, K. Arras and R. Siegwart,

[C32] R. Triebel, J. Shin and R. Siegwart,

[C33] L. Spinello, K. O. Arras, R. Triebel and R. Siegwart,

[C34] J. Shin, R. Triebel and R. Siegwart,

[C35] J. Maye, L. Spinello, R. Triebel and R. Siegwart,

[C36] L. Spinello, A. Macho, R. Triebel and R. Siegwart,

[C37] L. Spinello, R. Triebel and R. Siegwart,

[C38] D. Engel, L. Spinello, R. Triebel, C. Curio, R. Siegwart and H. Bulthoff,

[C39] L. Spinello, R. Triebel and R. Siegwart,
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[C40] L. Spinello, R. Triebel and R. Siegwart,
Multimodal People Detection and Tracking in Crowded Scenes,

[C41] R. Triebel, O. Martinez Mozos and W. Burgard,
Collective Classification for Labeling of Places and Objects in 2D and 3D Range Data,

[C42] R. Kümmerle, P. Pfaff, R. Triebel and W. Burgard,
Active Monte Carlo Localization in Outdoor Terrains using Multi-Level Surface Maps,
Fachgespräche Autonome Mobile Systeme (AMS), 2007.

[C43] R. Triebel and W. Burgard,
Recovering the Shape of Objects in 3D Point Clouds with Partial Occlusions,

[C44] R. Kümmerle, R. Triebel, P. Pfaff, and W. Burgard,
Monte Carlo Localization in Outdoor Terrains using Multi-Level Surface Maps,

[C45] P. Pfaff, R. Triebel, C. Stachniss, P. Lamon, W. Burgard and R. Siegwart,
Towards Mapping of Cities,
2007.

[C46] R. Triebel, R. Schmidt, O. Martinez Mozos and W. Burgard,
Instance-based AMN Classification for Improved Object Recognition in 2D and 3D Laser Range Data,

[C47] R. Triebel, P. Pfaff and W. Burgard,
Multi-Level Surface Maps for Outdoor Terrain Mapping and Loop Closing,

[C48] R. Triebel, K. Kersting and W. Burgard,
Robust 3D Scan Point Classification using Associative Markov Networks,
2006.

[C49] H. Andreasson, R. Triebel and A. Lilienthal,
Vision-based Interpolation of 3D Laser Scans,

[C50] H. Andreasson, R. Triebel and W. Burgard,
Improving Plane Extraction from 3D Data by Fusing Laser Data and Vision,

[C51] R. Triebel and W. Burgard,
Improving Simultaneous Localization and Mapping in 3D Using Global Constraints,
Proc. of the Twentieth National Conference on Artificial Intelligence (AAAI), 2005.

[C52] R. Triebel, W. Burgard and F. Dellaert,
Using Hierarchical EM to Extract Planes from 3D Range Scans,
2005.
[C53] R. Triebel, B. Frank, J. Meyer and W. Burgard,
First steps towards a robotic system for flexible volumetric mapping of indoor environments,

A system for volumetric robotic mapping of underground mines,

[C55] D. Hähnel, R. Triebel, W. Burgard and S. Thrun,
Map Building with Mobile Robots in Dynamic Environments,