Shape Analysis

List of Publications

[J1] E. Rodola, L. Cosmo, M. M. Bronstein, A. Torsello and D. Cremers,
Partial Functional Correspondence,

[J2] L. Cosmo, E. Rodola, A. Albarelli, F. Memoli and D. Cremers,
Consistent Partial Matching of Shape Collections via Sparse Modeling,

[J3] D. Boscaini, J. Masci, E. Rodola, M. M. Bronstein and D. Cremers,
Anisotropic Diffusion Descriptors,

[J4] O. Litany, E. Rodola, A. M. Bronstein, M. M. Bronstein and D. Cremers,
Non-Rigid Puzzles,

[J5] M. Strumia, F. R. Schmidt, C. Anastasopoulos, C. Granziera, G. Krueger and T. Brox,
White Matter MS-Lesion Segmentation Using a Geometric Brain Model,

[C1] T. Windheuser and D. Cremers,
A Convex Solution to Spatially-Regularized Correspondence Problems,
European Conference on Computer Vision (ECCV), October 2016.

[J1] A. Albarelli, E. Rodola and A. Torsello,
Fast and Accurate Surface Alignment through an Isometry-Enforcing Game,

[J2] E. Rodola, A. Albarelli, D. Cremers and A. Torsello,
A Simple and Effective Relevance-based Point Sampling for 3D Shapes,

[C1] E. Rodola, M. Moeller and D. Cremers,
Point-wise Map Recovery and Refinement from Functional Correspondence,
Proceedings Vision, Modeling and Visualization (VMV), Aachen, Germany, 2015, Received the Best Paper Award.

[J1] E. Rodola, S. Rota Bulo and D. Cremers,
Robust Region Detection via Consensus Segmentation of Deformable Shapes,
Shape Analysis  
List of Publications

[C1] E. Rodola, S. Rota Bulo, T. Windheuser, M. Vestner and D. Cremers,  
Dense Non-Rigid Shape Correspondence Using Random Forests,  
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2014.

[C2] T. Windheuser, M. Vestner, E. Rodola, R. Triebel and D. Cremers,  
Optimal Intrinsic Descriptors for Non-Rigid Shape Analysis,  

[C3] A. Kanezaki, E. Rodola, D. Cremers and T. Harada,  
Learning Similarities for Rigid and Non-Rigid Object Detection,  

[J1] E. Rodola, A. Albarelli, F. Bergamasco and A. Torsello,  
A Scale Independent Selection Process for 3D Object Recognition in Cluttered Scenes,  

[C1] E. Rodola, T. Harada, Y. Kuniyoshi and D. Cremers,  
Efficient Shape Matching using Vector Extrapolation,  

[C2] E. Rodola, A. Torsello, T. Harada, Y. Kuniyoshi and D. Cremers,  
Elastic Net Constraints for Shape Matching,  
*IEEE International Conference on Computer Vision (ICCV)*, Sydney, Australia, December 2013.

[C3] D. Cremers, E. Rodola and T. Windheuser,  
Relaxations for Minimizing Metric Distortion and Elastic Energies for 3D Shape Matching,  

[C1] E. Rodola, A.M. Bronstein, A. Albarelli, F. Bergamasco and A. Torsello,  
A game-theoretic approach to deformable shape matching,  

[J1] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers,  
Large-Scale Integer Linear Programming for Orientation-Preserving 3D Shape Matching,  
[C1] A. Albarelli, E. Rodola and A. Torsello,
A Non-Cooperative Game for 3D Object Recognition in Cluttered Scenes,

[C2] A. Torsello, E. Rodola and A. Albarelli,
Sampling Relevant Points for Surface Registration,

[C3] T. Windheuser, U. Schlickewei, F. R. Schmidt and D. Cremers,
Geometrically Consistent Elastic Matching of 3D Shapes: A Linear Programming Solution,
*IEEE International Conference on Computer Vision (ICCV)*, 2011.

[C4] M. Aubry, U. Schlickewei and D. Cremers,
Pose-Consistent 3D Shape Segmentation Based on a Quantum Mechanical Feature Descriptor,

[C5] T. Schoenemann, S. Masnou and D. Cremers,
On a linear programming approach to the discrete Willmore boundary value problem and generalizations,

[C6] M. Aubry, U. Schlickewei and D. Cremers,
The Wave Kernel Signature: A Quantum Mechanical Approach To Shape Analysis,
*IEEE International Conference on Computer Vision (ICCV) - Workshop on Dynamic Shape Capture and Analysis (4DMOD)*, 2011.

[C1] A. Albarelli, E. Rodola and A. Torsello,
A Game-Theoretic Approach to Fine Surface Registration without Initial Motion Estimation,

[C2] A. Albarelli, E. Rodola and A. Torsello,
Loosely Distinctive Features for Robust Surface Alignment,

[C1] F. R. Schmidt, E. Toeppe and D. Cremers,
Efficient Planar Graph Cuts with Applications in Computer Vision,
*IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Miami, Florida, 351-356, June 2009, Received a CVPR Doctoral Spotlight Award.
[C1] F. R. Schmidt, Dirk Farin and D. Cremers,  
**Fast Matching of Planar Shapes in Sub-cubic Runtime,**  

[C2] F. R. Schmidt, E. Toeppe, D. Cremers and Y. Boykov,  
**Intrinsic Mean for Semimetrical Shape Retrieval via Graph Cuts,**  

[C3] F. R. Schmidt, E. Toeppe, D. Cremers and Y. Boykov,  
**Efficient Shape Matching via Graph Cuts,**  

[C1] F. R. Schmidt, M. Clausen and D. Cremers,  
**Shape Matching by Variational Computation of Geodesics on a Manifold,**  