## Austrian Science Found FWF-P18716-N13

## Tracking with Structure in Computer Vision

## $twist_{+1}$ Publications February 26, 2007

- [1] Sammuel Peltier, Adrian Ion, Yll Haxhimusa, and Walter Guillaume Damiand Kropatsch. Computing homology group generators of images using irregular graph pyramids. In *Accepted in 15th Graph-based Representation for Pattern Recognition.*, Alicante, Spain, 2007.
- [2] Sammuel Peltier, Adrian Ion, Yll Haxhimusa, and Walter G. Kropatsch. Controlling geometry of homology generators. In M. Grabner and H. Grabner, editors, *Proceedings of the 12th. Computer Vision Winter Workshop*, St. Lambrecht, Austria, February 2007. OCG.
- [3] Yll Haxhimusa, Walter G. Kropatsch, Zygmunt Pizlo, Adrian Ion, and Andreas Lehrbaum. Approximating TSP Solution by MST based Graph Pyramid. In *Accepted in 15th Graph-based Representation for Pattern Recognition*.
- [4] Samuel Peltier, Adrian Ion, Yll Haxhimusa, and Walter G. Kropatsch. Computing homology group generators of images using irregular graph pyramids. Technical Report PRIP-TR-111, PRIP, TU Wien, 2006.
- [5] Walter G. Kropatsch, Yll Haxhimusa, and Pascal Lienhardt. Hierarchies Relating Topology and Geometry. In 11th Iberoamerical Congress on Pattern Recognition, November 2006, Cancun, Mexico, 2006.
- [6] Thomas Illetschko. Minimal Combinatorial Maps for Analyzing 3D Data. Master's thesis, Vienna University of Technology, Faculty of Informatics, Institute of Computer Aided Automation, Pattern Recognition and Image Processing Group, 2006.
- [7] Thomas Illetschko, Adrian Ion, Yll Haxhimusa, and Walter G. Kropatsch. Effective Programming of Combinatorial Maps using COMA A C++ Framework for Combinatorial Maps. Technical Report PRIP-TR-106, PRIP, TU Wien, 2006.
- [8] Thomas Illetschko. Minimal Combinatorial Maps for Analyzing 3D Data. Technical Report PRIP-TR-110, PRIP, TU Wien, 2006.
- [9] Stefan Fiel and Paul Guerrero. Motion Tracking with Normalized Cut and Minimum Spanning Tree. Technical Report PRIP-TR-105, PRIP, TU Wien, 2006.
- [10] Axel Pinz, Horst Bischof, Walter G. Kropatsch, Gerald Schweighofer, Yll Haxhimusa, Andreas Opelt, and Adrian Ion. Representations for Cognitive Vision: A Review

- of Appearance-Based, Spatio-Temporal, and Graph-Based Approaches. Technical Report PRIP-TR-109 and EMT-2006-02, PRIP, TU Wien, 2006.
- [11] Adrian Ion, Thomas Illetschko, Yll Haxhimusa, and Walter G. Kropatsch. Distinguishing 3D-topological configurations of two Tori. In *In 8th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing*, pages 111–118, Timisoara, Romania, 2006.
- [12] Walter G. Kropatsch, Yll Haxhimusa, and Pizlo Zygmunt. MST based Pyramid Model of TSP. In In the 39th Annual Meeting of Mathematical Psychology, Vancouver, Canada, 2006. Talk.
- [13] Yll Haxhimusa, Adrian Ion, and Walter G. Kropatsch. Irregular Pyramid Segmentations with Stochastic Graph Decimation Strategies. In *Proceeding of the 11th Iberoamerical Congress on Pattern Recognition*, pages 277–280, November 2006, Cancun, Mexico, 2006.
- [14] Yll Haxhimusa. Structurally Optimal Dual Graph Pyramid and its Application in Image Partitioning. PhD thesis, Vienna University of Technology, Faculty of Informatics, Institute of Computer Aided Automation, Pattern Recognition and Image Processing Group, 2006.
- [15] Zygmunt Pizlo, Emil Stefanov, John Saalweachter, Zheng Li, Yll Haxhimusa, and Walter G. Kropatsch. Traveling Salesman Problem: a Foveating Model. *The Journal* of Problem Solving, Vol. 1(1):accepted, 2006.
- [16] Yll Haxhimusa, Adrian Ion, and Walter G. Kropatsch. Comparing Hierarchies of Segmentations: Humans, Nomalized Cut, and Minimum Spanning Tree. In Frank Lenzen, Otmar Scherzer, and Markus Vincze, editors, *Proceedings of 30th OEAGM Workshop*, pages 95–103, Obergurgl, Austria, 2006. OCG-Schriftenreihe books@ocg.at, Österreichische Computer Gesellschaft. Band 209.
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- [19] Adrian Ion, Hubert Hausegger, Walter G. Kropatsch, and Yll Haxhimusa. How Humans Describe Short Videos. In *International Cognitive Vision Workshop*, Graz, A, May 2006.

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- [21] Walter G. Kropatsch, Adrian Ion, Yll Haxhimusa, and Thomas Flanitzer. The Eccentricity Transform (of a digital shape). In Attila Kuba, editor, *Discrete Geometry for Computer Imagery*, Lecture Notes in Computer Science, page accepted, Szeged, Hungary, 2006. Springer, Berlin Heidelberg.