

## LARS M. C. BRETZNER

### SELECTED PUBLICATIONS

#### Peer-reviewed journal articles

Shoukofandeh A., Bretzner L., Macrini D., Demirci M., Jönsson C. and Dickinson S. “The representation and matching of categorical shape”, *Computer Vision and Image Understanding*, vol 103, pp. 139-154, 2006

Demirci M., Shokoufandeh A., Keselman Y., Bretzner L. and Dickinson S. “Object recognition as many-to-many feature matching”, *International Journal of Computer Vision*, vol 69(2), pp. 203-222, 2006

Bretzner L. and Lindeberg T. “Qualitative multi-scale feature hierarchies for object tracking” *Journal of Visual Communication and Image Representation*, vol. 11, pp. 115-129, 2000. (also in *Proc. Sec. Int. Conf. on Scale-Space Theories in Computer Vision*, Corfu, Greece, 1999. Springer LNCS vol 1682, pp. 117-128.)

Bretzner L. and Lindeberg T. “Feature tracking with automatic selection of spatial scales”, *Computer Vision and Image Understanding*, vol. 71(3), pp. 385-392, 1998.

#### Peer-reviewed conference papers

Linde O. and Bretzner L. “Local histogram based descriptors for recognition”, *Proc. Int. Conf. Computer Vision Theory and Applications (VISAPP)*, Lisboa, Portugal, Feb 2009.

Novatnack J., Denton T., Shokoufandeh A., and Bretzner L. “Stable bounded canonical sets and image matching”, *Proc. Int. Workshop Energy Minimization Methods in Computer Vision and Pattern Recognition*, St. Augustine, Florida, USA, Nov 2005.

Bretzner L. and Krantz M. “Towards low-cost systems for measuring visual cues of driver fatigue and inattention in automotive applications”, *Proc. IEEE Int. Conf. on Vehicular Electronics and Safety*, Xian, China, Oct 2005.

Bretzner L., Thuresson B. and Lenman S. “Combining hand gestures and flow menus in computer interfaces”, *Proc 11th International Conf. on Human-Computer Interaction*, Las Vegas, July 2005

Demirci M, Shokoufandeh A., Dickinson S., Keselman Y and Bretzner L. “Many-to-many feature matching using spherical coding of directed graphs”, *Proc. 8th European Conf. on Computer Vision*, Prague, 2004, Springer LNCS

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Lenman S., Bretzner L., and Thuresson B., “Using marking menus to develop command sets for computer vision based hand gesture interfaces”, *Proc Second Nordic Conference on Human-Computer Interaction*, NordiCHI02, Aarhus, Denmark, Oct 2002.

Bretzner L., Laptev I. and Lindeberg T. "Hand gesture recognition using multi-scale colour features, hierarchical models and particle filters" *Proc Fifth Int. Conf. on Automatic Face and Gesture Recognition*, Washington D.C., May 2002.

Shokoufandeh A., Dickinson S., Jönsson C., Bretzner L. and Lindeberg T. "On the representation and matching of qualitative shape at multiple scales" *Proc. 7th European Conf. on Computer Vision*, Copenhagen, May 2002. Springer LNCS.

Bretzner L. and Lindeberg T. "Use your hand as a 3-D mouse or Relative orientation from extended sequences of sparse point and line correspondences using the affine trifocal tensor" *Proc. Fifth European Conf. on Computer Vision*, Freiburg, Germany, 1998. Springer LNCS vol 1406, pp. 141-157.

Bretzner L. and Lindeberg T. "On the handling of spatial and temporal scales in feature tracking" *Proc. First Int. Conf. on Scale-Space Theories in Computer Vision*, Utrecht, 1997. Springer LNCS vol 1252, pp. 128-139.

Maki A., Bretzner L. and Eklundh J.-O. "Local Fourier phase and disparity estimates: An analytical study" *Proc. 6th International Conf. on Computer Analysis of Images and Patterns*, Prague, 1995.

#### **PATENT**

Lindeberg T. and Bretzner L. "Förfarande och anordning för överföring av information genom rörelsedetektering, samt användning av anordningen". (Method and arrangement for controlling means for three-dimensional transfer of information by motion detection), Swedish Patent, 1998.