List Of Publications

Conference and Journal Papers

Directly related to this thesis:

- *A Multi-Variate Contour Detector for High-Resolution Polarimetric SAR Images*,D. Borghys and C. Perneel, M. Acheroy, Proc. Int. Conf. on Pattern Recognition, sept 2000, Barcelona, vol 3, pp 650-655.

- *Contour Detection in High-Resolution Polarimetric SAR Images*,D. Borghys and C. Perneel and M. Acheroy, Proc. SPIE Conference on SAR Image Analysis, Modeling and Techniques, sept. 2000, Barcelona.

- *Detection of Built-Up Areas in Polarimetric SAR Images* ,D. Borghys and C. Perneel and M. Acheroy, Proc. 1st Int. Workshop on Pattern Recognition in Remote Sensing, sept. 2000, Andorra

- *Contribution to the Automatic Registration and Interpretation of SAR Images for Remote Sensing*, D. Borghys, C. Perneel, and M. Acheroy, Proc. Int. Conf. Defence Optics 2000, Brussels, Belgium; 19-21 June 2000.

- *Automatic Detection of Built-Up Areas in High-Resolution Polarimetric SAR Images*, to appear in *Pattern Recognition Letters: Special Issue on Pattern Recognition for Remote Sensing*, 2001 (in press).

- *A Hierarchical Approach for Registration of High-Resolution Polarimetric SAR Images*, Proc. SPIE Int. Conf. on Image and Signal Processing for Remote Sensing VII, Toulouse, Sept 2001, Paper nr. 4541-2 (in press).

- *Interpretation of Multi-Aspect High-Resolution Polarimetric SAR Images*, Proc. SPIE Int. Conf. on SAR Image Analysis, Modeling and Techniques IV, Toulouse, Sept. 2001, Paper nr. 4543-13 (in press).

Publications on other topics:

- *Data Fusion for the detection of Vehicles in Multi-Sensor Image Sequences*, D. Borghys, C. Perneel, and M. Acheroy; Proc. Int. Conference *Defence Optics 2000*, Brussels, Belgium; 19-21 June 2000.

- *Semi-Automatic Interpretation of Multi-Sensor Multi-Spectral Images*, W. Mees, P. Druyts, D. Borghys, Y. Ouaghli, C. Miravet, J. Santamaria, H. Suess, C. Perneel, M. Acheroy, J.-L. Valero accepted for publication in PE&RS (Photogrammetric Engineering & Remote Sensing) journal.
- *Road detection on digitized maps*, D. Borghys, C. Perneel, E. Nyssen, and M. Acheroy, in International Symposium on Pattern Recognition: *In Memoriam Pierre Devijver*, February 1999.
- *Sahara - semi-automatic help for aerial region analysis, system description and final evaluation*, Pascal Druyts, Wim Mees, Dirk Borghys, Youssef Ouaghli, Christiaan Perneel, Marc Acheroy, and J-L Valero, in Third NATO/IRIS Joint Symposium, Quebec City, Quebec, october 1998.
- *Multi-level Data Fusion for the Detection of Targets using multi-spectral Image Sequences*, D. Borghys, P. Verlinde, C. Perneel, M. Acheroy, SPIE/Optical Engineering journal: Special issue on Sensor Fusion, vol 37, nr 2, feb 1998, pp 477-484.
- *SAHARA: Semi-Automatic Help for Aerial Region Analysis*, P. Druyts, D. Borghys, W. Mees, C. Perneel, J.L. Valero, International Society for Photogrammetry and Remote sensing's (ISPRS) joint workshop on *Sensors and Mapping from Space*, Univ. of Hannover, 29 sept -2 oct 1997.
- *Data Fusion for long range Target Acquisition*, P. Verlinde, D. Borghys, C. Perneel, M. Acheroy, AGARD/SPP Symposium on *Multi-sensor systems and data fusion for telecommunications, remote sensing and radar*, sept 1997.
- *Long Range Target Detection in a Cluttered Environment using Multi-Sensor Image Sequences*, D. Borghys, P. Verlinde, C. Perneel, M. Acheroy, Proc. SPIE Conference on *Signal Processing, Sensor Fusion and Target Recognition*, presented at *the 11th International Aerosense Symposium*, SPIE, in Marriot's Orlando World Center, Florida, 21 - 25 avril 1997
- *Application of MRF models to the restoration of Image Sequences*, URSI-FORUM'96, Facult Polytechnique de Mons, dec 1996.
- *Noise Reduction in Image Sequences with sparse temporal Sampling*, D. Borghys, M. Acheroy, in *IASTED International conference on Signal Processing (SIP'95)*, 20-23 nov 1995, Las Vegas, NV, USA.
- *Long Range Automatic Detection of Small Targets in Sequences of Noisy Thermal Infrared Images*, D. Borghys, C. Perneel, M. Acheroy, in Proc. of the SPIE Conference on *Signal and Data Processing of Small Targets* of the 8 th International Aerosense Symposium , SPIE, in Orlando, Florida (USA), april 1994.

Technical Reports:

- *SAHARA: Semi-Automatic Help for Aerial Region Analysis: WP3 Final Report*, P. Druyts, D. Borghys, C. Perneel, M. Acheroy, jan 1998, Research report for the WEU satellite center on the workpackage concerning the used image processing algorithms.

- *SAHARA: Semi-Automatic Help for Aerial Region Analysis: WP1 Final Report*, D. Borghys, C. Perneel, M. Acheroy, jan 1998, Research report for the WEU satellite center, describing the image database and the image registration.

- *Multi-Sensor Image Fusion for the Detection of Targets in the Battlefield of the Future*, Final Report on a Cooperative Project on Image Processing conducted by NATO/RTB(SET-TG01) formerly AC243/P3/RSG9, D. Borghys, L. Svigny, T. Sams, R. Gabler, B. Hoeltzener, P.B.W. Schwering, J.F. Haddon, J.A. Knecht, Jan 1998.

- *STANAG 3596 based Multispectral Information System - Feasibility Study - Final Report*: Research report for the WEU satellite center concerning the feasibility of automatically detecting a number of objects using airborne visual, infrared and SAR images, dec 1995.

- *Meetprocedure voor het bepalen van de gecalibreerde thermische signatuur en bepaling van de stralingsdemping*, D. Borghys, Technical report decribing a procedure to determine the thermal signature of a vehicle and the calculation of attenuation (by camouflage) of the emmited thermal energy, Rapport Technique du Service Technique de la Force Terrestre, 1990.

- *Temperatuurcalibratie van infraroodbeelden* (Temperature calibration of infrared images), D. Borghys, F. Van der Putten et P. Verlinde, Rapport d'activits No 39/88 (1988) du Service Technique de la Force Terrestre, Centrum voor Technologische Toepassingen/Divisie Toegepaste Electronica.

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