MATHIAS ORTNER

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Birth : Lyon, December 13th, 1978
Nationality : French

EDUCATION

2001-2004: (3 years)	***Ph.D. in Computer Science*** *(image processing, advisor: J. Zerubia) To be defended in October 04.* "Building Extraction from Digital Elevation Models using marked point processes"	Ariana project CNRS INRIA UNSA France
2000-2001: (12 months)	***Master Thesis in applied mathematics*** *obtained with the highest honours. Major: statistics and probabilities.*	Université Paul Sabatier, Toulouse, France
1998-2001:	***Engineering degree****. Majors: Information acquisition and processing. Minors: Space Imaging.* Majors during two first years : Mathematics, Computer Sciences and Automatics.	French Aeronautics and Space Engineering School (ENSAE), Toulouse,France
1996-1998:	Preparation for the competitive entrance exam to French Engineering Schools ("Les grandes écoles"). It is an intensive preparation in Maths and Physics.	Rennes, France
1996 :	*Baccalaureat S (Maths and Physics) with highest honours*	

PROFESSIONAL EXPERIENCE

2001 : (6 months)	Ariana project (CNRS / INRIA / UNSA). Study of spatial point processes and the related MCMC simulation methods.
1999 : (1 months)	Training period in the French Observatory: "Observatoire des Midi-Pyrénées". Realisation of a mini search engine for Internet.

TEACHING

2004:	Optional lecture. Course Instructor. "Algorithms in image processing". Responsible for lectures (10h), examinations and supervised practical work (10h).	Université de Nice, First degree (3rd year) in Computer Sciences

LANGUAGES

French : Mother tongue
English : Fluent (TOEFL score: 598)
German : good notions
Spanish and Italian : beginner

COMPUTER SKILLS

Languages : Fortran, C, C++, HTML etc…
OS : Unix, Linux, Mac

Software : Matlab, Maple, Envi, Word, Latex

MISCELLANEOUS

Interest in : Hiking, reading, writing, cooking, guitar playing. Special interest in the Game of Go.

PUBLICATIONS

http://www-sop.inria.fr/ariana/personnel/Mathias.Ortner/

Proceedings, French Conferences :

Un nouveau modèle pour l'extraction de caricatures de batiments sur des Modèles Numériques d'Elevation. M. Ortner, X. Descombes and J. Zerubia, In Proc. of TAIMA 2003. Hammamet (Tunisie). Octobre 2003.

Extraction automatique de caricatures de batiments sur des Modèles Numériques d'Elévation. M. Ortner, X. Descombes, and J. Zerubia. In Pixels et Cités, ENSG, Marne la Vallée, France, November 2003.

French Journal

Extraction automatique de caricatures de batiments sur des Modèles Numériques d'Elévation. M. Ortner, X. Descombes, and J. Zerubia. In "Bulletin de la S.F.P.T.". To appear.

Proceedings, International Conferences

Building Extraction from Digital Elevation Models. M. Ortner, X. Descombes and J. Zerubia, In Proc. of ICASSP'03. Honk Kong. April 2003.

A Discontinuity detector for building extraction from Digital Elevation Models by stochastic geometry. M. Ortner, X. Descombes and J. Zerubia, In Proc. of EUSIPCO'04. Vienna, September 2004.

Research reports

Building Extraction from Digital Elevation Model. M. Ortner, X. Descombes and J. Zerubia, INRIA Research Report No 4517, INRIA Sophia-Antipolis, July 2002

Improved RJMCMC point process sampler for object detection by simulated annealing. M. Ortner, X. Descombes and J. Zerubia, INRIA Research Report No 4900 , August 2003

Automatic 3D land register extraction from altimetric data in dense urban areas. M. Ortner, X. Descombes and J. Zerubia, INRIA Research Report No 4919 , August 2003

Invited communications

Marked point processes in image analysis: from context to geometry. X. Descombes, F. Kruggel, C. Lacoste, M. Ortner, G. Perrin and J. Zerubia. In "Spatial Point Process Modelling and its Applications", Castellon (Spain), April 2004.

A Reversible Jump MCMC sampler for building detection in image processing. M. Ortner, X. Descombes and J. Zerubia. In " Monte Carlo methods and quasi-Monte Carlo methods ", Special Session "In Image Processing.". Juan Les Pins (France) , June 2004.

Submitted publications :

Building outline extraction from Digital Elevation Models using marked point processes. M. Ortner, X. Descombes and J. Zerubia, (journal paper) submitted to IJCV in november 2003 (needs some revisions).