Curriculum Vitæ

Identity

Guillaume Charpiat
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Nationality : French
Birth : October 6, 1981, in Paris

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Studies

2003-2006 : PhD thesis on "Shape statistics for image segmentation with priors" supervised by Olivier Faugeras, within the Odyssee Team.

2002-2003 : Theoretical Physics (Master's final year lessons as free attender).

2001-2002 : Vision and Learning (Master's final year degree) at the ENS Cachan (with highest honors)
Master internship on "Planar curve deformation", supervised by Olivier Faugeras and Renaud Keriven.

2000-2001 : Mathematics (Master's first year degree, with high honors),
Mathematics (Bachelor's degree, with great honors),
Physics (Bachelor's degree, with highest honors),
Master's internship on numerical scheme errors of fluid mechanics, supervised by Cécile Appert.

2000-2004 : Ecole Normale Supérieure (ENS) student.
2000 : Successful candidate in the exams of the Ecole Normale Supérieure and Ecole Polytechnique.

Teaching

2006-2007 : C++ Programming assignment at the Ecole Polytechnique.

2004-2006 : Numerical Analysis and Optimization assignment at the Ecole Polytechnique.

2003-2004 : Computer Science at the Ecole Nationale des Ponts et Chaussées (ENPC).

Publications

Book Chapters :

– G. Charpiat, O. Faugeras, R. Keriven, and P. Maurel, *Approximations of shape metrics and application to shape warping and empirical shape statistics*, Statistics and Analysis of Shapes (H. Krim and A. Yezzi, eds.), Birkhäuser, 2006, pp. 363–395.

International Journals with Reviewing Board :

– G. Charpiat, P. Maurel, J.-P. Pons, R. Keriven, and O. Faug eras, *Generalized gradients : Priors on minimization flows*, International Journal of Computer Vision (2007).
– G. Charpiat, O. Faugeras, and R. Keriven, *Approximations of shape metrics and application to shape warping and empirical shape statistics*, Foundations of Computational Mathematics 5 (2005), no. 1, 1–58.

Other International Journals :

– O. Faugeras, G. Adde, G. Charpiat, C. Chefd'Hotel, M. Clerc, T. Deneux, R. Deriche, G. Hermosillo, R. Keriven, P. Kornprobst, J. Kybic, C. Lenglet, L. Lopez-Perez, T. Papadopoulo, J.-P. Pons, F. Ségonne, B. Thirion, D. Tschumperlé, T. Viéville, and N. Wotawa, *Variational, geometric, and statistical methods for modeling brain anatomy and function*, NeuroImage 23S1 (2004), S46–S55, Special issue : Mathematics in Brain Imaging - Edited by P.M. Thompson, M.I. Miller, T. Ratnanather, R.A. Poldrack and T.E. Nichols.

International Conferences with Reviewing Board and Proceedings :

– G. Charpiat, R. Keriven, J.-P. Pons, and O. Faugeras, *Designing spatially coherent minimizing flows for variational problems based on active contours*, 10th International Conference on Computer Vision, vol. 2, 2005, pp. 1403–1408.
– G. Charpiat, R. Keriven, and O. Faugeras, *Image statistics based on diffeomorphic matching*, 10th International Conference on Computer Vision, vol. 1, 2005, pp. 852–857.
– G. Charpiat, O. Faugeras, and R. Keriven, *Shape metrics, warping and statistics*, International Conference on Image Processing, vol. 2, 2003, pp. II–627–630.

Other International Conferences with Proceedings :

– G. Charpiat, P. Maurel, R. Keriven, and O. Faugeras, *Distance-based shape statistics*, International Conference on Acoustics, Speech, and Signal Processing, Special Session : Statistical Inferences on Nonlinear Manifolds with Applications in Signal and Image Processing, vol. 5, 2006, pp. V–925–926.

Invited Poster :

– Poster at the *Designing Tomorrow's Category-Level 3D Object Recognition Systems : An International Workshop* (September 2003).

Other Invited Talks :

– *Mean Shape and Shape Statistics* at the conference *Shape Optimization and Image Analysis* in Paris Dauphine University (June 2005) ;
– *Shape and Image Statistics* at the Physical Spectrometry Lab seminar, University Joseph Fourier of Grenoble (November 2005).

Misc.

Journal Reviewer for :	- the International Journal of Computer Vision (IJCV),
	- Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
Computer skills :	C/C++, Caml, HTML, LaTeX (Unix/Linux and Windows) ;
Languages :	French (native), English (fluently), German (skills) ;
Licences :	Driving licence ;
Hobbies :	Music, piano.