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CONTACT INFORMATION	Athena/Odyssée Project Team INRIA Sophia Antipolis 2004 Route des Lucioles-BP 93 FR-06902 Sophia Antipolis France	Center for Computational Medicine, LIAMA Institute of Automation, Chinese Academy of Sciences 95 Zhongguancun East Road 100190, Beijing China
EMAIL	Jian.Cheng@inria.fr	jiancheng@nlpr.ia.ac.cn jian.cheng.1983@gmail.com
CITIZENSHIP	China	
BIRTH	October 11, 1983, Tongling City, Anhui Province, China	
RESEARCH INTERESTS	<ul style="list-style-type: none">• Statistical computing on manifolds and its applications• PDE methods and their applications• Computer vision, medical image analysis• Diffusion MRI, functional MRI• Image registration, segmentation, regularization• Clustering, pattern recognition• Inverse problems, compressive sensing	
EDUCATION	INRIA Sophia Antipolis/University of Nice-Sophia Antipolis Ph.D. in Medical Image Analysis	September 2008 - May 2012
	Institute of Automation, Chinese Academy of Sciences M.S. & Ph.D. in Medical Image Analysis	September 2005 - May 2012
	Harbin Institute of Technology B.S., major in Electrical Engineering, minor in Computer Science	September 2001 - July 2005
AWARDS	<ul style="list-style-type: none">• Student Travel Award, MICCAI 2011• Second Prize of Pan-Deng Scholarship, CASIA• Triple-A Outstanding Student Award, CASIA• Bourse Doctorales en Alternance (Bourse du Gouvernement Français)• Excellent Diploma Thesis, HIT• Third Class Scholarship, HIT• First Class Scholarship, HIT• Second Class Scholarship, HIT	2011 2009 - 2010 2009 - 2010 2008 - 2011 July 2005 2003 - 2004 2002 - 2003 2001 - 2002
RESEARCH EXPERIENCE	Research Assistant <ul style="list-style-type: none">• Athena/Odyssée Project Team, INRIA Sophia Antipolis• LIAMA, Institute of Automation, Chinese Academy of Sciences Summer School <ul style="list-style-type: none">• 1st Sino-USA Summer School in Vision, Learning, and Pattern Recognition• Sino-French Summer School and Workshop on Mathematical Methods for Multi-Channel Image Processing,	September 2008 - present September 2005 - present July 20 - 27, 2009 July 3 - 8, 2006
PROFESSIONAL ACTIVITIES	Reviews IEEE Transactions on Medical Imaging MICCAI 2011-2012	

TECHNICAL SKILLS **Programming** : C/C++, shell, Matlab, Mathematica, Maple
Tools : Vim, L^AT_EX, CMake, Git, SVN
Operating Systems : Linux, Windows

PUBLICATIONS

Journal Papers

1. **Jian Cheng**, Aurobrata Ghosh, Rachid Deriche, Tianzi Jiang, “An Intrinsic Diffeomorphism Invariant Riemannian Framework for Probability Density Function Computing in diffusion MRI”, *IEEE Transaction on Medical Imaging* (in revision)
2. Nianming Zuo, **Jian Cheng**, Tianzi Jiang, “Diffusion Magnetic Resonance Imaging for Brainnetome : A Critical Review”, *Neuroscience Bulletin* (accepted)

Conference Papers

1. **Jian Cheng**, Tianzi Jiang, Rachid Deriche, “Nonnegative Definite EAP and ODF Estimation via a Unified Multi-Shell HARDI Reconstruction”, in *Proceedings of 15th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI’12)*, Nice, October 1-5, 2012. (**MICCAI Student Travel Award**)
2. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, Rachid Deriche, “Diffeomorphism Invariant Riemannian Framework for Ensemble Average Propagator Computing”, in *Proceedings of 14th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI’11)*, Toronto, September 18-22, 2011. (**MICCAI Student Travel Award**)
3. **Jian Cheng**, Tianzi Jiang, Rachid Deriche, “Theoretical Analysis and Practical Insights on EAP Estimation via a Unified HARDI Framework”, *Computational Diffusion MRI workshop (CDMRI’11)*, in conjunction with the MICCAI’11, Toronto, September 18-22, 2011. (**Oral**)
4. **Jian Cheng**, Sylvain Merlet, Aurobrata Ghosh, Emmanuel Caruyer, Tianzi Jiang, Rachid Deriche, “Compressive Sensing Ensemble Average Propagator Estimation via L1 Spherical Polar Fourier Imaging”, *Computational Diffusion MRI workshop (CDMRI’11)*, in conjunction with the MICCAI’11, Toronto, September 18-22, 2011. (**Oral**)
5. Emmanuel Caruyer, **Jian Cheng**, Christophe Lenglet, Guillermo Sapiro, Tianzi Jiang, Rachid Deriche, “Optimal Design of Multiple Q-shells experiments for Diffusion MRI”, *Computational Diffusion MRI workshop (CDMRI’11)*, in conjunction with the MICCAI’11, Toronto, September 18-22, 2011. (**Oral**)
6. Sylvain Merlet, **Jian Cheng**, Aurobrata Ghosh, Rachid Deriche, “Spherical Polar Fourier EAP and ODF Reconstruction via Compressed Sensing in Diffusion MRI”, in *Proceedings of 2011 IEEE International Symposium on Biomedical Imaging : From Nano to Macro (ISBI’11)*, Chicago, United States, March 30 - April 2, 2011.
7. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, Rachid Deriche, “Model-free and Analytical EAP Reconstruction via Spherical Polar Fourier Diffusion MRI”, in *Proceedings of 13th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI’10)*, Beijing, September 20-24, 2010.
8. **Jian Cheng**, Aurobrata Ghosh, Rachid Deriche, Tianzi Jiang, “Model-Free, Regularized, Fast, and Robust Analytical Orientation Distribution Function Estimation”, in *Proceedings of 13th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI’10)*, Beijing, September 20-24, 2010.
9. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, Rachid Deriche, “A Riemannian Framework for Orientation Distribution Function Computing”, in *Proceedings of 12th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI’09)*, London, September 20-24, 2009.
10. **Jian Cheng**, Feng Shi, Kun Wang, Ming Song, Jiefeng Jiang, Lijuan Xu, Tianzi Jiang, “Nonparametric Mean Shift Functional Detection on Functional Space for Task and Resting-state fMRI”, *Workshop on fMRI data analysis : statistical modeling and detection issues in intra- and inter-subject functional MRI data analysis*, in conjunction with the MICCAI 2009, London, September 20-24, 2009. (**Oral**)
11. Xi Li, Weiming Hu, Zhongfei Zhang, Xiaoqin Zhang, Mingliang Zhu, **Jian Cheng**, “Visual tracking via incremental Log-Euclidean Riemannian subspace learning”, in *Proceedings of IEEE International Conference on Computer Vision and Pattern Recognition (CVPR’08)*, Anchorage, Alaska, June 24-26, 2008.

Conference Abstracts

1. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, and Rachid Deriche, “A Riemannian Framework for Ensemble Average Propagator Computing”, *19th Scientific Meeting and Exhibition of the ISMRM*, Montréal, Canada, May 7-13, 2011.
2. **Jian Cheng**, Sylvain Merlet, Aurobrata Ghosh, Emmanuel Caruyer, Tianzi Jiang, and Rachid Deriche, “Compressive Sensing Ensemble Average Propagator Estimation via L1 Spherical Polar Fourier Imaging”, *19th Scientific Meeting and Exhibition of the ISMRM*, Montréal, Canada, May 7-13, 2011.
3. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, Rachid Deriche, “Fast, model-free, analytical diffusion PDF profile estimation from the DWI signals”, in *Proceedings of the Sixteenth Annual Meeting of the Organization for Human Brain Mapping (OHBM’10)*, Barcelona, Spain, June 6-10, 2010
4. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, Rachid Deriche, “Fast, Model-Free, Analytical ODF Reconstruction from the Q-Space Signal”, in *Proceedings of the Sixteenth Annual Meeting of the Organization for Human Brain Mapping (OHBM’10)*, Barcelona, Spain, June 6-10, 2010.
5. **Jian Cheng**, Aurobrata Ghosh, Tianzi Jiang, Rachid Deriche, “Riemannian Median and Its Applications for Orientation Distribution Function Computing”, in *Proceedings of 18th Scientific Meeting and Exhibition of the ISMRM*, Stockholm, Sweden, May 1-7, 2010.

RESEARCH
PRESENTATIONS

1. “Theoretical Analysis and Practical Insights on EAP Estimation via a Unified HARDI Framework”, *MICCAI workshop on Computational Diffusion MRI workshop (CDMRI’11)*, Toronto, 2011
2. “Compressive Sensing Ensemble Average Propagator Estimation via L1 Spherical Polar Fourier Imaging”, *MICCAI workshop on Computational Diffusion MRI workshop (CDMRI’11)*, Toronto, 2011
3. “Optimal Design of Multiple Q-shells experiments for Diffusion MRI”, *MICCAI workshop on Computational Diffusion MRI workshop (CDMRI’11)*, Toronto, 2011
4. “Mathematical Modeling for Diffusion Magnetic Resonance Imaging”, invited talk, *International Conference on Mathematical Methods for Imaging*, Guangzhou, China, 2010.
5. “Nonparametric Mean Shift Functional Detection on Functional Space for Task and Resting-state fMRI”, *MICCAI workshop on fMRI data analysis : statistical modeling and detection issues in intra- and inter-subject functional MRI data analysis*, London, 2009

REFERENCES

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France

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