

## Xiaoming Deng

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CONTACT INFORMATION	Associate Professor Beijing Key Laboratory of Human-Computer Interaction Institute of Software, Chinese Academy of Sciences 4# South Fourth Street Zhong Guan Cun, Beijing 100190, P.R. China	<i>E-mail:</i> idengxm@gmail.com <i>WWW:</i> www.idengxm.com
RESEARCH INTERESTS	<b>Computer vision:</b> specifically related to camera calibration, 3D reconstruction, omnidirectional vision, simultaneous-localization and mapping (SLAM), human motion tracking and synthesis	
ACADEMIC APPOINTMENTS	<b>Associate Professor</b> July 2011 to present Beijing Key Laboratory of Human-Computer Interaction, Institute of Software, Chinese Academy of Sciences <b>Research Fellow</b> April 2012 to June 2013 Department of Electrical & Computer Engineering, National University of Singapore (NUS) <ul style="list-style-type: none"><li>• Advisor: Professor Ping Tan</li></ul> <b>Assistant Professor</b> June 2010 to June 2011 Beijing Key Laboratory of Human-Computer Interaction, Institute of Software, Chinese Academy of Sciences <b>Postdoctoral Research Fellow</b> January 2008 to May 2010 Virtual Reality Laboratory, Institute of Computing Technology, Chinese Academy of Sciences <ul style="list-style-type: none"><li>• Advisor: Professor Zhaoqi Wang</li><li>• Also working with Professor Shihong Xia</li></ul>	
EDUCATION	<b>National Laboratory of Pattern Recognition (NLPR), Institute of Automation, Chinese Academy of Sciences, Beijing, China</b>  Ph.D., Pattern Recognition and Intelligent System, January 2008 <ul style="list-style-type: none"><li>• Thesis Topic: <i>Omnidirectional Camera Calibration and 3D Reconstruction</i></li><li>• Advisor: Professor Fuchao Wu</li><li>• Also working with Professor Zhanyi Hu and Professor Yihong Wu</li><li>• Area of Study: Computer Vision</li></ul>	
AWARDS AND HONORS	<ul style="list-style-type: none"><li>• K.C.Wong post-doctoral fellowship award in 2009 (Awarded annually to 50 post-doctoral research fellows from all institutes of Chinese Academy of Sciences).</li><li>• Member of Youth Innovation Promotion Association, Chinese Academy of Sciences.</li></ul>	
SELECTED REFEREED JOURNAL PUBLICATIONS	<ul style="list-style-type: none"><li>[1] Xiaoming Deng, Fuchao Wu, Yihong Wu, Fuqing Duan, Liang Chang, and Hongan Wang. Self-calibration of Hybrid Central Catadioptric and Perspective Cameras. <i>Computer Vision and Image Understanding</i> 116(6): 715-729 (2012)</li><li>[2] Fuqing Duan, Fuchao Wu, Mingquan Zhou, Xiaoming Deng, and Yun Tian. Calibrating Effective Focal Length for Central Catadioptric Cameras using One Space Line. <i>Pattern Recognition Letters</i> 33(5): 646-653 (2012)</li><li>[3] Hui Zeng, Xiaoming Deng, and Zhanyi Hu. A New Normalized Method on Line-based Homography Estimation. <i>Pattern Recognition Letters</i> 29(9): 1236-1244 (2008)</li><li>[4] Liang Chang, Xiaoming Deng, Suiwu Zheng, Yongqing Wang. Scaling Up Kernel Grower Clustering Method for Large Data Sets via Core-sets. <i>Acta Automatica Sinica</i> 34 (3): 376-382(2008)</li></ul>	

SELECTED  
CONFERENCE  
PUBLICATIONS

- [5] Xiaoming Deng, Fuchao Wu, Yihong Wu. An Easy Calibration Method for Central Catadioptric Cameras, *Acta Automatica Sinica* (2007)
- [6] Xiaoming Deng, Jie Liu, Feng Tian, Liang Chang, Hongan Wang. Motion Estimation of Multiple Depth Cameras Using Spheres. *ICIP* 2014..
- [7] Xiaoming Deng, Shihong Xia, Wenzhong Wang, Zhaoqi Wang, Liang Chang, Hongan Wang. Automatic Gait Motion Capture with Missing-marker Fillings. *ICPR* 2014.
- [8] Zhenglong Zhou, Bo Shu, Shaojie Zhuo, Xiaoming Deng, Ping Tan, Stephen Lin. Image-based Clothes Animation for Virtual Fitting. *SIGGRAPH Asia* 2012 Technique Briefs.
- [9] Liang Chang, Xiaoming Deng, Mingquan Zhou, Fuqing Duan, Zhongke Wu: Smoothness-constrained Face Photo-sketch Synthesis using Sparse Representation. *ICPR* 2012: 3025-3029
- [10] Xiaoming Deng, Fuchao Wu, Yihong Wu, Liang Chang, Wei Liu, Hongan Wang: Calibration of Central Catadioptric Camera with One-dimensional Object undertaking General Motions. *ICIP* 2011: 637-640
- [11] Liang Chang, Mingquan Zhou, Yanjun Han, Xiaoming Deng. Face Sketch Synthesis via Sparse Representation. *ICPR* 2010: 2146-2149
- [12] Wenzhong Wang, Xiaoming Deng, Xianjie Qiu, Shihong Xia, Zhaoqi Wang. Learning Local Models for 2D Human Motion Tracking. *ICIP* 2009: 2589-2592
- [13] Xiaoming Deng, Fuchao Wu, Yihong Wu, Fuqing Duan. Visual Metrology with Uncalibrated Radial Distorted Images. *ICPR* 2008.

PROFESSIONAL  
SERVICE

**Committee Service**

- Executive Member, Computer Vision Task Forces Forum, China Computer Federation.

**Journal Reviewer**

- *CVIU*– *Computer Vision and Image Understanding*.
- *MVA*– *Machine Vision and Applications*.
- *OE*– *Optical Engineering*.
- *SMC*– *IEEE Transactions on Systems, Man and Cybernetics*.

**Program Committee Member or Reviewer**

- *ACCV*– *Asia Conference on Computer Vision*, 2014.
- *APCHI*– *Asia Pacific Conference on Computer Human Interaction*, 2012.
- *ICPR*– *International Conference on Pattern Recognition*, 2006, 2008, 2012.
- *IUI*– *ACM International Conference on Intelligent User Interfaces*, 2012.
- *SIGCHI*– *ACM CHI Conference on Human Factors in Computing Systems*, 2012.
- *SIGGRAPH Asia*– *ACM Conference on Computer Graphics and Interactive Techniques in Asia*, 2012.
- *WACV*– *IEEE Winter Applications of Computer Vision Conference*, 2015.