

Xiaoming Deng

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	Computer vision: specifically related to camera calibration, 3D reconstruction, omnidirectional vision, simultaneous-localization and mapping (SLAM), human motion tracking and synthesis	
ACADEMIC APPOINTMENTS	Associate Professor July 2011 to present Beijing Key Laboratory of Human-Computer Interaction, Institute of Software, Chinese Academy of Sciences Research Fellow April 2012 to June 2013 Department of Electrical & Computer Engineering, National University of Singapore (NUS) <ul style="list-style-type: none">• Advisor: Professor Ping Tan Assistant Professor June 2010 to June 2011 Beijing Key Laboratory of Human-Computer Interaction, Institute of Software, Chinese Academy of Sciences Postdoctoral Research Fellow January 2008 to May 2010 Virtual Reality Laboratory, Institute of Computing Technology, Chinese Academy of Sciences <ul style="list-style-type: none">• Advisor: Professor Zhaoqi Wang• Also working with Professor Shihong Xia	
EDUCATION	National Laboratory of Pattern Recognition (NLPR), Institute of Automation, Chinese Academy of Sciences, Beijing, China Ph.D., Pattern Recognition and Intelligent System, January 2008 <ul style="list-style-type: none">• Thesis Topic: <i>Omnidirectional Camera Calibration and 3D Reconstruction</i>• Advisor: Professor Fuchao Wu• Also working with Professor Zhanyi Hu and Professor Yihong Wu• Area of Study: Computer Vision School of Mathematics and Statistics, Wuhan University, Wuhan, China B.S. and M.S., Computational Mathematics, June 2004	
AWARDS AND HONORS	<ul style="list-style-type: none">• Excellent Young Researcher Program, Institute of Software, Chinese Academy of Sciences, 2014.• Member of Youth Innovation Promotion Association, Chinese Academy of Sciences, 2013.• K.C.Wong Post-doctoral Fellowship Award, 2009 (Awarded annually to 50 post-doctoral research fellows from all institutes of Chinese Academy of Sciences).• Huawei Scholarship for Outstanding Graduate Students, 2003.	
SELECTED REFEREED JOURNAL PUBLICATIONS	[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) [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)	

- [3] Hui Zeng, Xiaoming Deng, and Zhanyi Hu. A New Normalized Method on Line-based Homography Estimation. *Pattern Recognition Letters* 29(9): 1236-1244 (2008)
- [4] Liang Chang, Xiaoming Deng, Suiwu Zheng, Yongqing Wang. Scaling Up Kernel Grower Clustering Method for Large Data Sets via Core-sets. *Acta Automatica Sinica* 34 (3): 376-382(2008)
- [5] Xiaoming Deng, Fuchao Wu, Yihong Wu. An Easy Calibration Method for Central Catadioptric Cameras, *Acta Automatica Sinica* (2007)
- [6] Liang Chang, Yves Rozenholc, Xiaoming Deng, Fuqing Duan, Mingquan Zhou. Face Sketch Synthesis Using Non-local Means and Patch-based Seaming. *ICIP* 2015.
- [7] Xiaoming Deng, Jie Liu, Feng Tian, Liang Chang, Hongan Wang. Motion Estimation of Multiple Depth Cameras Using Spheres. *ICIP* 2014.
- [8] Xiaoming Deng, Shihong Xia, Wenzhong Wang, Zhaoqi Wang, Liang Chang, Hongan Wang. Automatic Gait Motion Capture with Missing-marker Fillings. *ICPR* 2014.
- [9] Zhenglong Zhou, Bo Shu, Shaojie Zhuo, Xiaoming Deng, Ping Tan, Stephen Lin. Image-based Clothes Animation for Virtual Fitting. *SIGGRAPH Asia* 2012 Technique Briefs.
- [10] Liang Chang, Xiaoming Deng, Mingquan Zhou, Fuqing Duan, Zhongke Wu: Smoothness-constrained Face Photo-sketch Synthesis using Sparse Representation. *ICPR* 2012: 3025-3029
- [11] 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
- [12] Liang Chang, Mingquan Zhou, Yanjun Han, Xiaoming Deng. Face Sketch Synthesis via Sparse Representation. *ICPR* 2010: 2146-2149
- [13] Wenzhong Wang, Xiaoming Deng, Xianjie Qiu, Shihong Xia, Zhaoqi Wang. Learning Local Models for 2D Human Motion Tracking. *ICIP* 2009: 2589-2592
- [14] Xiaoming Deng, Fuchao Wu, Yihong Wu, Fuqing Duan. Visual Metrology with Uncalibrated Radial Distorted Images. *ICPR* 2008.

SELECTED
CONFERENCE
PUBLICATIONS

TEACHING
EXPERIENCE

Institute of Software, Chinese Academy of Sciences, Beijing, China

Guest Lecturer: Computer Vision

November 2013, 2014, 2015

- Ph.D. student course in computer science
- Lecture: “an overview of computer vision, image based modelling, and object recognition”

University of Chinese Academy of Sciences, Beijing, China

Lecturer: Computer Vision Based User Interface

December 2015

- Master student course in computer science
- Lecture: “image based modelling, object recognition, motion tracking/synthesis and applications in user interfaces”

PROFESSIONAL
SERVICE

Committee Service

- Committee, Computer Vision Task Forces Forum, China Computer Federation.

Journal Reviewer

- *CVIU– Computer Vision and Image Understanding.*
- *MVA– Machine Vision and Applications.*
- *OE– Optical Engineering.*
- *PRL– Pattern Recognition Letters.*
- *SMC– IEEE Transactions on Systems, Man and Cybernetics.*
- *TIP– IEEE Transactions on Image Processing.*
- *TOMM– ACM Transactions on Multimedia Computing, Communications, and Applications.*

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, 2016.*