

# Ping Tan

School of Computing Science,  
Simon Fraser University,  
8888 University Drive,  
Burnaby, BC, Canada V5A 1S6

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## Education

- **Ph.D. in Computer Science**, Hong Kong University of Science & Technology, Hong Kong. August 2007. Advisor: Prof. Long Quan
  - **M.S. in Pattern Recognition and Intelligent System**, Shanghai Jiao Tong University, Shanghai, China. April 2003.
  - **B.S. in Applied Mathematics**, Shanghai Jiao Tong University, Shanghai, China. July 2000.
  - **B.E. (secondary degree) in Computer Engineering**, Shanghai Jiao Tong University, Shanghai China. July 2000.
  - **Special Class for Gifted Youth** (22 students selected nationwide by the university), Shanghai Jiao Tong University, Shanghai, China. September 1996.
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## Professional Experiences

- **Associate Professor** at Simon Fraser University  
Canada, September 2016 –
  - **Assistant Professor** at Simon Fraser University  
Canada, August 2014 – August 2016
  - **Associate Professor** at National University of Singapore  
Singapore, July 2014 – August 2014
  - **Assistant Professor** at National University of Singapore  
Singapore, October 2007 – July 2014.
  - **Research Assistant** at Hong Kong University of Science and Technology,  
Hong Kong, September 2003 – October 2007.
  - **Internship** at Microsoft Research Asia, Beijing, 2001 – 2003, 2005 summer.
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## Awards

- 2014, Canada NSERC Discovery Acceleration Supplements, (among top 125 NSERC Discovery proposals nationwide across all disciplines, about 10 proposals are in computer science).
- March 2012, TR35@Singapore, (among top 12 innovators under the age of 35 selected from Southeast Asia, Australia, and New Zealand).
- June 2012, Image and Vision Computing 2012 Outstanding Young Researcher Honorable Mention Award (renamed to PAMI Outstanding Young Researcher Award since 2013).

- February 2010, the '10 Netexplorateurs of the Year 2010' award ('10 most promising digital initiatives) by Netexplorateurs, for the 'Sketch2Photo' work.

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## Professional Activities

Journal Associate Editors/Editorial Board Members:

International Journal of Computer Vision (IJCV),  
Computer Graphics Forum (CGF),  
Machine Vision and Applications Journal (MVA),  
Unmanned Systems.

Conference Organization Chairs:

Pacific Graphics 2013.

Conference Senior Reviewers (Area Chairs):

SIGGRAPH 2012, 2014, 2016

SIGGRAPH Asia 2011, 2012, 2014

Asian Conference on Computer Vision (ACCV) 2014,

International Conference on Pattern Recognition (ICPR) 2012,

Pacific-Rim Symposium on Image and Video Technology (PSIVT) 2009.

Conference Program Committee (Reviewers):

SIGGRAPH and SIGGRAPH Asia, since 2009,

International Conference on Computer Vision (ICCV), since 2009,

Computer Vision and Pattern Recognition (CVPR), since 2008,

European Conference on Computer Vision (ECCV), since 2010,

Pacific Graphics (PG), since 2009

Journal Reviewers:

IEEE Trans. Pattern Recognition and Machine Intelligence, since 2008,

International Journal of Computer Vision, since 2009,

ACM Trans. On Graphics, since 2010.

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## Grants

"Unrestricted Research Gift", Adobe, USD \$17,500, 2015, PI: Ping Tan.

"Improving of GPS Localization by 3D Vision", NSERC Engage, CAD \$25,000,  
01/08/2015 – 31/01/2016, PI: Ping Tan.

"Vision-based Autonomous Navigation and HRI for a Team of Flying Robots",  
NSERC RTI, CAD \$112,922, 31/03/2015—31/03/2016, PI: Ping Tan.

"SFM++: Toward Active, Collaborative, and Semantic Structure-from-Motion  
(SFM)", NSERC Discovery Acceleration Supplements, CAD\$120,000,  
01/04/2014—31/03/2017, PI: Ping Tan.

"SFM++: Toward Active, Collaborative, and Semantic Structure-from-Motion  
(SFM)", NSERC Discovery, CAD\$270,000, 01/04/2014—31/03/2019, PI: Ping  
Tan.

- "Unrestricted Research Gift", Adobe, USD \$19,000, 2013, PI: Ping Tan.
- "Mind-Visualizer: Data Driven Media Creation and Editing", A\*STAR PSF GRANT, 06/02/2012—05/02/2015, SGD \$619,200, PI: Ping Tan.
- "Development of Autonomous Micro Aerial Vehicles", DSO and MOE, 01/11/2010—30/10/2013, SGD \$1,200,000, PI for the vision system: Ping Tan, PI for the control system: Ben Chen, PI for the power system: Palani Balaya.
- "Vision-based SLAM in Dynamic Scenes", Asian Office of Aerospace Research and Development (AOARD), 01/10/2011—30/09/2013, USD\$120,000, PI: Ping Tan.
- "Full Color Large -Screen Digital Holographic 3D Display For Home", A\*STAR SERC GRANT, 03/01/2010—02/28/2012, SGD\$1,202,580. PI: Xu Xuewu, Co-PI: Farzam Farbiz, Ping Tan.
- "A Projective Framework for Reflectance Symmetries and Appearance Modeling", Academic Research Fund, 10/01/2009—09/30/2012, SGD \$894,455. PI: Ping Tan.
- "Digitizing Historical Architectures", Microsoft eHeritage, 08/01/2009—07/31/2010, USD \$15,000. PI: Ping Tan.
- "Image-based Urban Modeling", NUS Startup Grant, 01/01/2008—12/31/2010, SGD \$170,888. PI: Ping Tan.
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## **University Activities**

### **Course Taught**

- CMPT361 Introduction to Computer Graphics, 2014-2015
- CMPT888 3D Vision and Applications, 2015
- EE5731R Visual Computing, 2010—2013
- EE4212 Computer Vision, 2010—2014
- EE4213 Image Processing, 2009—2014
- EE2012 Analytic Methods in Engineering (tutorial), 2008—2009
- EE4701 Video Processing, 2008—2009

### **Postdoc Advising**

- Changqing Zou, 2015 – present (co-advised with Richard Zhang)
- Xiaoming Deng, 2011-2013, now an associate professor at Institute of Software, China Academy of Sciences (CAS), Beijing, China
- Yugang Liu, 2011-2012, now a lecturer at University of Electronic Science and Technology of China (UESTC), Chengdu, China
- Shaojie Zuo, 2010-2012, now a research associate at Qualcomm, Canada
- Danping Zou, 2009-2012, now an assistant professor at Shanghai Jiao Tong University (SJTU), Shanghai, China
- Bo Shu, 2010-2012, now in a startup company, China
- Li Shen, 2008-2010, now a researcher at Institute of Infocomm Research (I2R), A\*STAR, Singapore

### **PhD Thesis Advising**

- Chengzhou Tang, 2015 – present

Renjiao Yi, 2014 – present  
Zhaopeng Cui, 2012 – present  
Rui Huang, 2011 – present  
Shuaicheng Liu, 2010-2014, now an associate professor at University of Electronic Science and Technology of China (UESTC), Chengdu, China  
Zhe Wu, 2009-2014, now a postdoc at Singapore University of Technology and Design (SUTD), Singapore  
Zhenglong Zhou, 2009-2014, now software engineer at Giant Interactive, Shanghai, China  
Nianjuan Jiang, 2008-2012, now a researcher at Advanced Digital Sciences Center (ADSC), Singapore

### **Master Thesis Advising**

Luwei Yang, 2015 – present  
Pei-Lin Wang, 2012 – 2014, now a software engineer in China  
Yinda Zhang, 2011 – 2013, now a PhD candidate at Princeton  
Long Gao, 2008 – 2010, now a lecturer at Harbin University of Science and Technology (HRBUST), Harbin, China

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### **Invited Seminars, Colloquia, and Keynote Lectures**

“Computational Videography”, Google Seattle, September, 2015  
—————, Keynote at the International Forum for Young Scholars, University of Electronic Science and Technology of China, December, 2015  
“Appearance Capture and Material Classification”, Carnegie Mellon University, October, 2015  
“3D Vision and Beyond”, MacDonald, Dettwiler and Associates, Vancouver, January, 2015  
—————, Google Mountain View, February, 2015  
—————, NEC Labs American, Cupertino, February, 2015  
—————, 2015 Field Trials, National Canadian Field Robotics Network, August, 2015  
—————, University of British Columbia, August, 2015  
—————, Shanghai Jiao Tong University, December, 2015  
“Towards Automatic Content Creation”, CG in Asia, SIGGRAPH 2014, August, 2014  
“3D Vision for Graphics”, SIGGRAPH Program Committee Workshop, Princeton, March, 2014  
“Multiview Photometric Stereo with Spatially Variant Isotropic Materials”, Multimedia, Graphics, and Computing seminar, Singapore, January, 2014  
“Challenges and Applications in Structure-from-Motion”, Keynote at Computer Graphics Workshop (CGW), Taiwan, July, 2013  
“Creating 3D Tree Models from Images”, Keynote at Virtual Reality Continuum and Its Applications in Industry (VRCAI), Hong Kong, December, 2011

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### **Publication**

#### **Journal papers:**

1. Legible compact calligrams,  
Changqing Zou, Junjie Cao, Warunika Ranaweera, Ibraheem Alhashim, *Ping Tan*,  
Alla Sheffer, Hao Zhang,  
ACM Transaction on Graphics (**TOG**) and Proc. of **SIGGRAPH** 2016.
2. Learning 3D Scene Synthesis from Annotated RGB-D Images,  
Zeinab Sadeghipour, Zicheng Liao, Ping Tan, Hao Zhang,  
Computer Graphics Forum(CGF) and Proc. of the Eurographics Symposium on  
Geometry Processing (**SGP**), Vol. 35, No. 5, 2016.
3. An example-based approach to 3D man-made object reconstruction from line  
drawings,  
Changqing Zou, Tianfan Xue, Xiaojiang Peng, Honghua Li, Baochang Zhang, Ping  
Tan, Jianzhuang Liu,  
Pattern Recognition, Vol 60, pp. 543—553, Dec 2016.
4. Garment Modeling with a Depth Camera  
Xiaowu Chen, Bin Zhou, Feixiang Lu, Lin Wang, Lang Bi, *Ping Tan*  
ACM Transaction on Graphics (**TOG**) and Proc. of **SIGGRAPH Asia** 2015.
5. Video Tonal Stabilization via Color States Smoothing,  
Yinting Wang, Dacheng Tao, Xiang Li, Mingli Song, Jiajun Bu, *Ping Tan*,  
IEEE Transaction on Image Processing (**TIP**), Vol 23, No. 11, pp. 4838--4849,  
Nov 2014.
6. TrackCam: 3D-aware Tracking Shots from Consumer Video,  
Shuaicheng Liu, Jue Wang, Sunghyun Cho, *Ping Tan*,  
ACM Transaction on Graphics (**TOG**) and Proc. of **SIGGRAPH Asia** 2014.
7. Bi-polynomial Modeling of Low-frequency Reflectances,  
Boxin Shi, *Ping Tan*, Yasuyuki Matsushita, Katsushi Ikeuchi,  
IEEE Transaction on Pattern Analysis and Machine Intelligence (**TPAMI**), Vol. 36,  
No 6, pp. 1078--1091, Feb 2014.
8. Bundled Camera Paths for Video Stabilization,  
Shuaicheng Liu, Lu Yuan, *Ping Tan*, Jian Sun,  
ACM Transaction on Graphics (**TOG**) and Proc. of **SIGGRAPH** 2013.
9. PoseShop: Human Image Database Construction and Personalized Content  
Synthesis,  
Tao Chen, *Ping Tan*, Li-Qian Ma, Ming-Ming Cheng, Ariel Shamir, Shi-Min Hu,  
IEEE Transaction on Visualization and Computer Graphics (**TVCG**), Vol. 19,  
Issue 5, pp. 824--837, May 2013.
10. CoSLAM: Collaborative Visual SLAM in Dynamic Environments,  
Danping Zou, *Ping Tan*,  
IEEE Transaction on Pattern Analysis and Machine Intelligence (**TPAMI**), Vol. 35,  
No 2, pp. 354--366, Feb 2013.
11. Manifold Preserving Edit Propagation,  
Xiaowu Chen, Dongqing Zou, Qinqing Zhao, *Ping Tan*,

- ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH Asia, Vol. 31, Issue 6, 2012.
12. A Closed-form Solution to Retinex with Non-local Texture Constraints,  
Qi Zhao, *Ping Tan*, Qiang Dai, Li Shen, Enhua Wu, Stephen Lin,  
IEEE Transaction on Pattern Analysis and Machine Intelligence (**TPAMI**), Vol 34,  
Issue 7, pp. 1437–1444, Jul. 2012.
  13. Semantic Colorization with Internet Images,  
Yong Sang Chia, Shaojie Zhuo, Raj Kumar Gupta, Yu-Wing Tai, Siu-Yeung Cho,  
*Ping Tan*, Stephen Lin,  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH Asia, Vol. 30, Issue  
6, 2011
  14. Simultaneous Camera Pose and Correspondence Estimation with Motion  
Coherence,  
Wen-Yan Lin, Loong-Fah Cheong, *Ping Tan*, Guo Dong, Siying Liu,  
International Journal of Computer Vision (**IJCV**), Vol. 96 Issue 2, Pages 145-161,  
Jan. 2012
  15. The Geometry of Reflectance Symmetries,  
*Ping Tan*, Long Quan, Todd Zickler,  
IEEE Transaction on Pattern Analysis and Machine Intelligence (**TPAMI**), Vol 33,  
No. 12, pp. 2506--2520, Dec. 2011
  16. Richardson-Lucy Deblurring for Scenes Under A Projective Motion Path,  
Yu-Wing Tai, *Ping Tan*, Michael S. Brown,  
IEEE Transaction on Pattern Analysis and Machine Intelligence (**TPAMI**), Vol 33,  
No. 8, pp. 1603-1618, Aug. 2011.
  17. PhotoSketch: Internet Image Montage,  
Tao Chen, Ming-Ming Chen, *Ping Tan*, Ariel Shamir, Shi-Min Hu.  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH Asia, Vol. 28, Issue  
5, 2009.
  18. Symmetric Architecture Modeling with a Single Image,  
Nianjuan Jiang, *Ping Tan*, Loong-Fah Cheong.  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH Asia, Vol. 28, Issue  
5, 2009.
  19. Single Image Tree Modeling,  
*Ping Tan*, Tian Fang, Jianxiong Xiao, Peng Zhao, Long Quan,  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH Asia, vol 27, Issue  
5, 2008.
  20. Image-based Facade Modeling,  
Jianxiong Xiao, Tian Fang, *Ping Tan*, Peng Zhao, Eyal Ofek, Long Quan.  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH Asia, vol 27, Issue  
5, 2008.
  21. Subpixel Photometric Stereo,  
*Ping Tan*, Stephen Lin, Long Quan.

- IEEE Transaction on Pattern Analysis and Machine Intelligence (**TPAMI**), Vol 30, Issue 8, pp. 1460-1471, Aug. 2008.
22. Filtering and Rendering of Resolution Dependent Reflectance Models,  
*Ping Tan*, Stephen Lin, Long Quan, Baining Guo, Heung-Yeung Shum.  
IEEE Transaction on Visualization and Computer Graphics (**TVCG**), Vol 14, Issue 2, pp. 412-425, March - April 2008.
  23. Image-based Tree Modeling,  
*Ping Tan*, Gang Zeng, Jingdong Wang, Sing Bing Kang, Long Quan.  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH 2007, Vol 26, Issue 3.
  24. Image-based Plant Modeling,  
Long Quan, *Ping Tan*, Gang Zeng, Lu Yuan, Jingdong Wang, Sing Bing Kang.  
ACM Transaction on Graphics (**TOG**) and Proc. of SIGGRAPH 2006, Vol 25, Issue 3, pp. 599 - 604
  25. Image-based Modeling by Joint Segmentation,  
Long Quan, Jingdong Wang, *Ping Tan*, Lu Yuan.  
International Journal of Computer Vision (**IJCV**), Vol. 75, No. 1, pp. 135-150, 2007.

**Conference papers:**

1. MeshFlow: Minimum Latency Online Video Stabilization,  
Shuaicheng Liu, *Ping Tan*, Lu Yuan, Jian Sun, Bing Zeng,  
European Conference on Computer Vision (**ECCV**). Amsterdam, NL, Oct. 2016.
2. RepMatch: Robust Feature Matching and Pose for Reconstructing Modern Cities,  
Wen-Yan Lin, Siying Liu, Nianjuan Jiang, Minh. N. Do, *Ping Tan*, Jianbo Lu  
European Conference on Computer Vision (**ECCV**). Amsterdam, NL, Oct. 2016.
3. Attribute Recognition from Adaptive Parts  
Luwei Yang, Ligeng Zhu, Yichen Wei, Shuang Liang, *Ping Tan*,  
British Machine Vision Conference (**BMVC**), York, UK, Sep. 2016
4. A Benchmark Dataset and Evaluation for Non-Lambertian and Uncalibrated Photometric Stereo,  
Boxin Shi, Zhe Wu, Zhipeng Mo, Dinglong Duan, Sai-Kit Yeung, *Ping Tan*,  
IEEE Conference on Computer Vision and Patten Recognition (**CVPR**), Las Vegas, USA, Jun. 2016.
5. Automatic Fence Segmentation in Videos of Dynamic Scenes,  
Renjiao Yi, Jue Wang, *Ping Tan*,  
IEEE Conference on Computer Vision and Patten Recognition (**CVPR**), Las Vegas, USA, Jun. 2016.
6. Global Structure-from-Motion by Similarity Averaging,  
Zhaopeng Cui, *Ping Tan*  
International Conference on Computer Vision (**ICCV**), Santiago, Chile, Dec. 2015.

7. Linear Global Translation Estimation from Feature Tracks,  
Zhaopeng Cui, Nianjuan Jiang, Chengzhou Tang, *Ping Tan*  
British Machine Vision Conference (**BMVC**), Swansea, UK, Sep. 2015.
8. Orbiting a Moving Target with Multi-Robot Collaborative Visual SLAM  
Jacob Perron\*, Rui Huang\*, Jack Thomas, Lingkang Zhang, *Ping Tan*, Richard  
Vaughan (\* are first authors of equal contribution)  
Workshop on Multi-View Geometry in Robotics (WVIGRO), at the Robotics:  
Science and System (**RSS**), Rome. Italy, Jul 2015.
9. Simultaneous Video Defogging and Stereo Reconstruction,  
Zhuwen Li, *Ping Tan*, Robby T. Tan, Danping Zou, Steven Zhiying Zhou and  
Loong-Fah Cheong.  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), (**oral  
presentation**, <5% acceptance rate), MA, USA, Jun. 2015
10. Monocular Vision-based Autonomous Navigation System on a Toy Quadcopter  
in Unknown Environments,  
Rui Huang, *Ping Tan*, and Ben M. Chen,  
International Conference on Unmanned Aircraft Systems (ICUAS), Denver, USA,  
Jun. 2015
11. Photometric Stereo using Internet Images  
Boxin Shi, Kenji Inose, Yasuyuki Matsushita, *Ping Tan*, Sai-Kit Yeung, Katsushi  
Ikeuchi,  
International Conference on 3D Vision (**3DV**), 2014.
12. PanoContext: A Whole-room 3D Context Model for Panoramic Scene  
Understanding  
Yinda Zhang, Shuran Song, *Ping Tan*, Jianxiong Xiao  
European Conference on Computer Vision (**ECCV**), (**oral presentation**, <5%  
acceptance rate), Zurich, Switzerland, Sep. 2014
13. SteadyFlow: Spatially Smooth Optical Flow for Video Stabilization  
Shuaicheng Liu, Lu Yuan, *Ping Tan*, Jian Sun  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Ohio,  
USA, Jun. 2014.
14. A New Perspective on Material Classification and Ink Identification  
Rakesh Shiradkar, Li Shen, George Landon, Sim Heng Ong, *Ping Tan*  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Ohio,  
USA, Jun. 2014.
15. A Global Linear Method for Camera Pose Registration,  
Nianjuan Jiang, Zhaopeng Cui, *Ping Tan*,  
IEEE International Conference on Computer Vision (**ICCV**), (**oral  
presentation**, <5% acceptance rate), Sydney, Australia, Dec. 2013.
16. Learning CRFs for Image Parsing with Adaptive Subgradient Descent,  
Honghui Zhang, Jingdong Wang, *Ping Tan*, Jinglu Wang, Long Quan,



- IEEE International Conference on Computer Vision (**ICCV**), Sydney, Australia, Dec. 2013.
17. Garment Modeling from a Single Image,  
Bin Zhou, Xiaowu Chen, Qiang Fu, Kan Guo, *Ping Tan*,  
Pacific Graphics, 2013.
  18. FrameBreak: Dramatic Image Extrapolation by Guided Shift-Maps,  
Yinda Zhang, Jianxiong Xiao, James Hays, *Ping Tan*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Oregon, USA, Jun. 2013.
  19. Multi-view Photometric Stereo with Spatially Varying Isotropic Materials,  
Zhenglong Zhou, Zhe Wu, *Ping Tan*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Oregon, USA, Jun. 2013.
  20. Calibrating Photometric Stereo by Holistic Reflectance Symmetry Analysis,  
Zhe Wu, *Ping Tan*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Oregon, USA, Jun. 2013.
  21. Image Matting with Local and Nonlocal Smooth Priors,  
Xiaowu Chen, Dongqing Zou, Steven ZhiYing Zhou, Qinpeng Zhao, *Ping Tan*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Oregon, USA, Jun. 2013.
  22. Image-based Clothes Animation for Virtual Fitting,  
Zhenglong Zhou, Bo Shu, Shaojie Zhuo, Xiaoming Deng, *Ping Tan*, Stephen Lin,  
SIGGRAPH Asia Technical Briefs, Singapore, 2012.
  23. Detecting Discontinuities for Surface Reconstruction,  
Yinting Wang, Jiajun Bu, Na Li, Mingli Song, *Ping Tan*.  
International Conference on Pattern Recognition (**ICPR**), (*oral presentation*),  
Tsukuba, Japan, Nov. 2012.
  24. 3D Reconstruction of Dynamic Scenes with Multiple Handheld Cameras,  
Hanqing Jiang, Haomin Liu, *Ping Tan*, Guofeng Zhang, Hujun Bao,  
European Conference on Computer Vision (**ECCV**), Firenze, Italy, Oct. 2012.
  25. Estimation of Intrinsic Image Sequences from Image+Depth Video,  
Kyong Joon Lee, Qi Zhao, Xin Tong, Minmin Gong, Shahram Izadi, Sang Uk Lee,  
*Ping Tan*, Stephen Lin,  
European Conference on Computer Vision (**ECCV**), Firenze, Italy, Oct. 2012.
  26. Elevation Angle from Reflectance Monotonicity: Photometric Stereo for General Isotropic Reflectances,  
Boxin Shi, *Ping Tan*, Yasuyuki Matsushita, Katsushi Ikeuchi,  
European Conference on Computer Vision (**ECCV**), Firenze, Italy, Oct. 2012.

27. Seeing Double without Confusion: Structure-from-Motion in Highly Ambiguous Scenes,  
Nianjuan Jiang, *Ping Tan*, Loong-Fah Cheong.  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**),  
Providence, USA, Jun. 2012.
28. A Biquadratic Reflectance Model for Radiometric Image Analysis,  
Boxin Shi, *Ping Tan*, Yasuyuki Matsushita, Katsushi Ikeuchi.  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**),  
Providence, USA, Jun. 2012.
29. Video Stabilization with a Depth Camera,  
Shuaicheng Liu, Yinting Wang, Lu Yuan, Jiajun Bu, *Ping Tan*, Jian Sun.  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**),  
Providence, USA, Jun. 2012.
30. Multi-view Repetitive Structure Detection,  
Nianjuan Jiang, *Ping Tan*, Loong Fah Cheong,  
International Conference on Computer Vision (**ICCV**) Barcelona, Spain, Nov.  
2011.
31. Ring-Light Photometric Stereo,  
Zhenglong Zhou, *Ping Tan*,  
European Conference on Computer Vision (**ECCV**), Crete, Greece, Sep. 2010.
32. Self-calibrating Photometric Stereo,  
Boxin Shi, Yasuyuki Matsushita, Yichen Wei, Chao Xu, *Ping Tan*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**) (**oral  
presentation**, <5% acceptance rate), California, USA, Jun. 2010.
33. Simultaneous Camera Pose and Correspondence Estimation in Cornerless  
Images,  
Wen-Yan Lin, Guo Dong, *Ping Tan*, Loong-Fah Cheong, Chye-Hwang Yan.  
IEEE International Conference on Computer Vision (**ICCV**), Kyoto, Japan, Sep.  
2009.
34. A Projective Framework for Radiometric Image Analysis,  
*Ping Tan*, Todd Zickler,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), (**oral  
presentation**, < 5% acceptance rate), Florida, US, Jun. 2009.
35. Photometric Stereo and Weather Estimation Using Internet Images,  
Li Shen, *Ping Tan*,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**),  
Florida, US, Jun. 2009.
36. Intrinsic Image Decomposition with Non-Local Texture Cues,  
Li Shen, *Ping Tan*, Stephen Lin,  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Alaska,  
US, Jun. 2008

37. Joint Affinity Propagation for Multi-View Segmentation,  
Jianxiong Xiao, Jingdong Wang, *Ping Tan*, Long Quan,  
IEEE International Conference on Computer Vision (**ICCV**), (**oral presentation**,  
<5% acceptance rate), Rio de Janeiro, Brazil, Oct. 2007
38. Isotropy, Reciprocity and the Generalized Bas-Relief Ambiguity,  
*Ping Tan*, Satya P. Mallick, Long Quan, David Kriegman, Todd Zickler.  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), (**oral presentation**, <5% acceptance rate), Minnesota, US, Jun. 2007
39. Separation of Highlight Reflections from Textured Surfaces.  
*Ping Tan*, Stephen Lin, Long Quan.  
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), New York, US, Jun. 2006
40. Resolution-Enhanced Photometric Stereo,  
*Ping Tan*, Stephen Lin, Long Quan.  
European Conference on Computer Vision (**ECCV**), (**oral presentation**, <5% acceptance rate), Graz, Austria, May 2006
41. Multiresolution Reflectance Filtering,  
*Ping Tan*, Stephen Lin, Long Quan, Baining Guo, Heung-Yeung Shum,  
Eurographics Symposium on Rendering (**EGSR**), Konstanz, Germany, Jul. 2005
42. Highlight Removal by Illumination-constrained Inpainting,  
*Ping Tan*, Stephen Lin, Long Quan, Heung-Yeung Shum,  
IEEE International Conference on Computer Vision (**ICCV**), Nice, France, Oct. 2003