

Ping Tan

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

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 (SFU) Canada, September 2016 –
 - **Deputy Director** at Qihoo 360 AI Lab (on leave from SFU) China, September 2016 – April 2018
 - **Assistant Professor** at Simon Fraser University (SFU) Canada, August 2014 – August 2016
 - **Associate Professor** at National University of Singapore (NUS) Singapore, July 2014 – August 2014
 - **Assistant Professor** at National University of Singapore (NUS) Singapore, October 2007 – July 2014.
 - **Research Assistant** at Hong Kong University of Science and Technology, Hong Kong, September 2003 – October 2007.
 - **Visitor** at Harvard, Hosted: Prof. Todd Zickler, USA, 2006 and 2008 summer.
 - **Internship** at Microsoft Research Asia, Beijing, 2001 – 2005, 2007 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, Honorable Mention of the Image and Vision Computing Outstanding Young Researcher 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.

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):

IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2018;
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.

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.

University Activities

Course Taught

CMPT469 Computational Photography, 2018

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 – 2017, now an assistant research scientist at University of Maryland, College Park.

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 associate 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

Feitong Tan, 2017 – present
Sicong Tang, 2017 – present
Luwei Yang, 2017 – present
Chengzhou Tang, 2015 – present
Renjiao Yi, 2014 – present
Zhaopeng Cui, 2012 – 2016, now a postdoc at ETH Zurich
Rui Huang, 2011 – 2016, now a researcher at Alibaba AI Lab, China
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 Sohu Game, Shanghai, China
Nianjuan Jiang, 2008-2012, now a researcher at Advanced Digital Sciences Center (ADSC), Singapore

Master Thesis Advising

Luwei Yang, 2015 – 2017, now a PhD student with me
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

Invited Seminars, Colloquia, and Keynote Lectures

"3D Vision and Beyond", Oculus Research Pittsburg, January, 2016
"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", MutimediA, 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

Publication

Journal papers:

1. Outdoor Markerless Motion Capture with Sparse Handheld Video Cameras, Yangang Wang, Yebin Liu, Xin Tong, Qionghai Dai, *Ping Tan*, IEEE Transaction on Visualization and Computer Graphics (**TVCG**), Volume 24, Number 5, Pages 1856--1866, May 2018
2. Joint Hand Detection and Rotation Estimation Using CNN, Xiaoming Deng, Yinda Zhang, Shuo Yang, *Ping Tan*, Liang Chang, Ye Yuan, Hongan Wang, IEEE Transaction on Image Processing (**TIP**), Volume 27, Number 4, Pages 1888--1900, April 2018
3. Time Slice Video Synthesis by Robust Video Alignment, Zhaopeng Cui, Oliver Wang, *Ping Tan*, Jue Wang, ACM Transaction on Graphics (**TOG**) and Proc. of **SIGGRAPH** 2017
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.
 10. Bundled Camera Paths for Video Stabilization,
Shuaicheng Liu, Lu Yuan, *Ping Tan*, Jian Sun,
ACM Transaction on Graphics (**TOG**) and Proc. of **SIGGRAPH** 2013.
 11. 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.
 12. 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.
 13. 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.
 14. 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.
 15. 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
 16. 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
 17. 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
 18. 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.
19. 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.
 20. 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.
 21. 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.
 22. 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.
 23. 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.
 24. 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.
 25. 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.
 26. 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
 27. 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. PDMS: Polarimetric Dense Monocular SLAM, (*oral presentation, <5% acceptance rate*),
Luwei Yang, Feitong Tan, Ao Li, Zhaopeng Cui, Yasutaka Furukawa, *Ping Tan*,

- IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Salt Lake City, UT, Jun. 2018.
2. Very Large-Scale Global SfM by Distributed Motion Averaging,
Siyu Zhu, Runze Zhang, Lei Zhou, Tianwei Shen, Tian Fang, *Ping Tan*, Long Quan,
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Salt Lake City, UT, Jun. 2018.
 3. Active Image-based Modeling with a Toy Drone,
Rui Huang, Danping Zou, Richard Vaughan, *Ping Tan*,
IEEE International Conference on Robotics and Automation (**ICRA**), Brisbane, Australia, May 2018.
 4. GSLAM: Initialization-robust Monocular Visual SLAM via Global Structure-from-Motion,
Chengzhou Tang, Oliver Wang, *Ping Tan*,
International Conference on 3D Vision (**3DV**), Qingdao, China, Oct. 2017.
 5. DualGAN: Unsupervised Dual Learning for Image-to-Image Translation,
Zili Yi, Hao Zhang, *Ping Tan*, Minglun Gong,
International Conference on Computer Vision (**ICCV**), Venice, Italy, Oct. 2017.
 6. Polarimetric Multi-View Stereo,
Zhaopeng Cui, Jinwei Gu, Boxin Shi, *Ping Tan*, Jan Kautz,
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Honolulu, HI, Jul. 2017.
 7. 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.
 8. 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.
 9. Attribute Recognition from Adaptive Parts
Luwei Yang, Ligeng Zhu, Yichen Wei, Shuang Liang, *Ping Tan*,
British Machine Vision Conference (**BMVC**), York, UK, Sep. 2016
 10. 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 Pattern Recognition (**CVPR**), Las Vegas, USA, Jun. 2016.
 11. Automatic Fence Segmentation in Videos of Dynamic Scenes,
Renjiao Yi, Jue Wang, *Ping Tan*,
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Las Vegas, USA, Jun. 2016.
 12. Global Structure-from-Motion by Similarity Averaging,
Zhaopeng Cui, *Ping Tan*

- International Conference on Computer Vision (**ICCV**), Santiago, Chile, Dec. 2015.
13. Linear Global Translation Estimation from Feature Tracks,
Zhaopeng Cui, Nianjuan Jiang, Chengzhou Tang, *Ping Tan*
British Machine Vision Conference (**BMVC**), Swansea, UK, Sep. 2015.
 14. 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.
 15. 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
 16. 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
 17. 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.
 18. 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
 19. 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.
 20. 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.
 21. 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.
 22. 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.
23. Garment Modeling from a Single Image,
Bin Zhou, Xiaowu Chen, Qiang Fu, Kan Guo, *Ping Tan*,
Pacific Graphics, 2013.
24. 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.
25. 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.
26. 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.
27. Image Matting with Local and Nonlocal Smooth Priors,
Xiaowu Chen, Dongqing Zou, Steven ZhiYing Zhou, Qinping Zhao, *Ping Tan*,
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), Oregon,
USA, Jun. 2013.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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.

33. 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.
34. 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.
35. 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.
36. Multi-view Repetitive Structure Detection,
Nianjuan Jiang, *Ping Tan*, Loong Fah Cheong,
International Conference on Computer Vision (**ICCV**) Barcelona, Spain, Nov.
2011.
37. Ring-Light Photometric Stereo,
Zhenglong Zhou, *Ping Tan*,
European Conference on Computer Vision (**ECCV**), Crete, Greece, Sep. 2010.
38. 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.
39. 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.
40. 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.
41. 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.
42. 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

43. 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
44. 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
45. 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
46. 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
47. Multiresolution Reflectance Filtering,
Ping Tan, Stephen Lin, Long Quan, Baining Guo, Heung-Yeung Shum,
Eurographics Symposium on Rendering (**EGSR**), Konstanz, Germany, Jul. 2005
48. 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