# Name: 李同益 Tong-Yee Lee

註:網址 http://graphics.csie.ncku.edu.tw/Tony/record\_new.htm 可取得主要期刊 論文之相關 video 簡介。

### **Journal Paper**

## (a) ACM/IEEE Transactions/Journals

- 1. **(2011)** YuShuen Wang, Chaoli Wang, <u>Tong-Yee Lee</u>, Kwan-Liu Ma, "Feature-Preserved Volume Data Reduction and Visualization," *IEEE Transactions on Visualization and Computer Graphics*, vol. 17, No.2, Feb. Issue, pp. 171-181, 2011(SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007)
- (2011) I-Cheng Yeh, Chao-Hung Lin, Olga Sorkine, <u>Tong-Yee Lee</u>, "Template-based 3D Model Fitting Using Dual-domain Relaxation," accepted to appear in *IEEE Transactions on Visualization and Computer Graphics*, 2011 (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007)
- 3. (2011) Min-Wen Chao, Chao-Hung Lin, Jackie Assa, <u>Tong-Yee Lee</u>, "3D Motion Retrieval from Hand-drawn Sketch," accepted to appear in *IEEE Transactions on Visualization and Computer Graphics*, 2011 (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007)
- 4. (2010) Huisi Wu, Yushuen Wang, Kun-Chuan Feng, Tien-Tsin Wong, <u>Tong-Yee Lee</u>, Pheng-Ann Heng, "Resizing by Summarization", Vol. 29, No. 6, Article No. 159, *ACM Transactions on Graphics* (also in <u>Proceedings of SIGGRAPH Asia 2010 國際頂尖重要會議</u>), Seoul, 2010 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 5. (2010) YuShuen Wang, Hui-Chih Lin, Olga Sorkine, <u>Tong-Yee Lee</u>, "Motion-based Video Retargeting with Optimized Crop-and-Warp," *ACM Transaction on Graphics* (also in **Proceedings of SIGGRAPH 2010 國際頂尖重要會議**), Vol. 29, No.3, Article No. 90, pp. 1-9, July 2010 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 6. (2010) Hung-Kuo Chu, Wei-Hsin Hsu, Niloy J. Mitra, Daniel Cohen-Or, Tien-Tsin Wong, <u>Tong-Yee Lee</u>, "Camouflage Images," *ACM Transaction on Graphics* (also in Proceedings of SIGGRAPH 2010 國際頂尖重要會議), Vol. 29, No.3, Article No. 51, pp. 1-8, July 2010 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 7. (2010) Yao-Yang Tsai, Wen-Chieh Lin, Kuangyou B. Cheng, Jehee Lee, <u>Tong-Yee Lee</u>, "Real-time Physics-based 3D Biped Character Animation Using an Inverted Pendulum Model" *IEEE Transactions on Visualization and Computer Graphics*, March/April Issue, Vol. 16, No. 2, pp. 325-337,2010 (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).

- (2010) Zhi-Yuan Yao, Ming-Te Chi, <u>Tong-Yee Lee</u>, Tao Ju, "Singularity-aware Line Field Design Using Harmonic Functions," (under 1<sup>st</sup> revision) *IEEE Transactions on Visualization and Computer Graphics*(SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007)
- 9. (2010) I-Cheng Yeh, Wen-Chieh Lin, <u>Tong-Yee Lee</u>, Hsin-Ju Han, Jehee Lee, Manmyung Kim, "Event-Driven Motion Overview of Multi-Character Animation," (under 1<sup>st</sup> revision) *IEEE Transactions on Visualization and Computer Graphics*(SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007)
- 10. (2010) Kun-Chuan Feng, Chaoli Wang, Han-Wei Shen, <u>Tong-Yee Lee</u>, "Spatiotemporally Coherent Time-Varying Graph Drawing with Multi-Focus+Context," (under 1<sup>st</sup> revision) *IEEE Transactions on Visualization and Computer Graphics* (SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007)
- 11. (2010) Hongchuan YU, <u>Tong-Yee Lee</u>, I-Cheng Yeh, Xiaosong Yang, Wenxi Li and Jian J. Zhang, "Foldover-Free Constrained Texture Mapping" (under 1<sup>st</sup> revision) *IEEE Transactions on Visualization and Computer Graphics*, 2010, (SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007)
- 12. (2009) YuShuen Wang, Hongbo Fu, Olga Sorkine, <u>Tong-Yee Lee</u>, and Hans-Peter Seidel, "Motion-Aware Temporal Coherence for Video Resizing," *ACM Transaction on Graphics* (also in **Proceedings of SIGGRAPH Asia 2009 國際頂尖重要會議**), Vol. 28, No.5, Article: 127, Dec. 2009, (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 13. (2009) Niloy J. Mitra, Hung-Kuo Chu, <u>Tong-Yee Lee</u>, Lior Wolf, Hezy Yeshurun, Daniel Cohen-Or, "Emerging Images, "ACM Transaction on Graphics (also in Proceedings of SIGGRAPH Asia 2009 國際頂尖重要會議), Vol. 28, No.5, Article: 163, Dec. 2009, (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 14. (2009) Hung-Kuo Chu, <u>Tong-Yee Lee</u>, "Multi-resolution Mean Shift Clustering Algorithm for Shape Interpolation," *IEEE Transactions on Visualization and Computer Graphics*, vol. 15, No. 5, pp. 853-866, 2009 (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).
- 15. (2009) Min-Wen Chao, Chao-Hung Lin, Cheng-Wei Yu and <u>Tong-Yee Lee</u>, "A High Capacity 3D Steganography Algorithm," *IEEE Transactions on Visualization and Computer Graphics*, March/April ,vol. 15 no. 2, pp. 274-284,2009 (SCI/EI, ISI ranking: 8/86 = 9% @2008, 11/84=13% @2007).
- 16. (2008) Ming-Te Chi, <u>Tong-Yee Lee</u>, Yingge Qu, Tien-Tsin Wong, "Self-Animating Images: Illusory Motion Using Repeated Asymmetric Patterns," *ACM Transaction on Graphics* (also in Proceedings of ACM SIGGRAPH 2008 國際頂史重要會議) Vol. 27, No.3, Article: 62, August 2008 (SCI/EI, ISI ranking: 3/86 = 3%@2008.1/84=1%@2007)

- 17. (2008) Oscar Kin-Chung Au, Chiew-Lan Tai, Hung-Kuo Chu, Daniel Cohen-Or, Tong-Yee Lee, "Skeleton Extraction by Mesh Contraction," ACM Transaction on Graphics (also in Proceedings of ACM SIGGRAPH 2008 國際頂尖重要會議) Vol. 27, No.3, Article: 44, August 2008 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 18. (2008) Yu-Shuen Wang, Chiew-Lan Tai, Olga Sorkine, <u>Tong-Yee Lee</u>, "Optimized Scale-and-Stretch for Image Resizing," *ACM Transaction on Graphics* (also in Proceedings of SIGGRAPH Asia 2008 國際頂尖重要會議) Vol. 27, No.5, Dec. 2008 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 19. (2008) Jackie Assa, Daniel Cohen-Or, I-Cheng Yeh, <u>Tong-Yee Lee</u>, "Motion Overview of Human Actions," *ACM Transaction on Graphics* (also in <u>Proceedings of SIGGRAPH Asia 2008 國際頂尖重要會議</u>) Vol. 27, No.5, Dec. 2008 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 20. (2008) Yu-Shuen Wang, <u>Tong-Yee Lee</u>, Chiew-Lan Tai, "Focus+Context Visualization with Distortion Minimization," IEEE Transactions on Visualization and Computer Graphics (also in <u>Proceedings of IEEE Visualization 2008 國際頂尖重要會議</u>), Volume 14, Number 6, November, 2008 (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).
- 21. (2008) <u>Tong-Yee Lee</u>, Shao-Wei Yen I-Cheng Yeh, "Texture Mapping with Hard Constraints Using Warping Scheme," *IEEE Transactions on Visualization and Computer Graphics* March/April, Vol. 14, No. 2, pp. 382-395,2008 (SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007).
- 22. (2008) Chung-Ren Yan, Ming-Te Chi, <u>Tong-Yee Lee</u>, Wen-Chieh Lin, "Stylized Rendering Using Samples of a Painted Image," *IEEE Transactions on Visualization and Computer Graphics* March/April, Vol. 14, No. 2, pp. 468-480,2008 (SCI/EI, ISI ranking: 8/86 = 9% @2008, 11/84=13% @2007).
- 23. (2008) Tong-Yee Lee, Chao-Hung Lin, Yu-Shuen Wang, Tai-Guang Chen," Animation Key-frame Extraction and Simplification Using Deformation Analysis," *IEEE Transactions on Circuits and Systems for Video Technology*, April, Vol. 18, No. 4, 2008, pp. 478-486 (SCI/EI, ISI ranking: 24/229=10%, 41/227=18%@2007)
- 24. (2008) Yu-Shuen Wang, <u>Tong-Yee Lee</u>, "Curve Skeleton Extraction Using Non-Linear Least Squares Optimization," *IEEE Transactions on Visualization and Computer Graphics*, July/Aug, Vol. 14, No. 4. 2008, pp. 926-936 (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).
- 25. (2008) Zhi-Yuan Yao, <u>Tong-Yee Lee</u>, "Adaptive Geometry Image," *IEEE Transactions on Visualization and Computer Graphics*, July/Aug, Vol. 14, No. 4., 2008, pp. 948-960 (SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007).

- 26. (2007) <u>Tong-Yee Lee</u>, Chung-Ren Yen, Ming-Te Chi, "Stylized Rendering for Anatomic Visualization,", Special Issue Anatomic Rendering and Visualization, *IEEE Computing in Science & Engineering*, vol. 9, no. 1, pp. 13-19, Jan/Feb, 2007 (SCI/EI)
- 27. (2006) Ming-Te Chi, <u>Tong-Yee Lee</u>, "Stylized and Abstract Painterly Rendering System Using a Multi-Scale Segmented Sphere Hierarchy", VOL. 12, NO. 1, JANUARY/FEBRUARY, pp. 61-72, 2006, *IEEE Transactions on Visualization and Computer Graphics* (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).
- 28. (2005) Chao-Hung Lin, <u>Tong-Yee Lee</u>, "Metamorphosis of 3D Polyhedral Models Using Progressive Connectivity Transformations," *IEEE Transactions on Visualization and Computer Graphics* Jan./Feb. Issue, Vol. 11, No.1, pp. 2-12, 2005 (SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007).
- 29. (2004) Ping-Hsien Lin, <u>Tong-Yee Lee</u>, "Camera- Sampling Field and Its Applications," *IEEE Transactions on Visualization and Computer Graphics*, Vol. 10, No. 3, May/June, 2004, pp. 241-251. (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).
- 30. (2003) <u>Tong-Yee Lee</u>, P.H Huang, "Fast and Institutive Polyhedra Morphing Using SMCC Mesh Merging Scheme," *IEEE Transactions on Visualization and Computer Graphics*, Vol. 9, No. 1, pp. 85-98, 2003. (SCI/EI, ISI ranking: 8/86 = 9%@2008, 11/84=13%@2007).
- 31. (2002) <u>Tong-Yee Lee</u>, Chao-Hung Lin, "Feature-guided Shape-based Image Interpolation", *IEEE Transactions on Medical Imaging*, Dec. 2002 (SCI, EI), Vol. 21, No. 12, pp. 1479-1489. (SCI/EI, ISI ranking: 1/94=1% @2008, 1/92 = 1% @2007)
- 32. (2001) <u>Tong-Yee Lee</u>, Chao-Hung Lin, Han-Ying Lin, "Computer-aided Prototype System for Nose Surgery (Rhinoplasty)," *IEEE Transactions on Information Technology in Biomedicine*, Vol. 5, Issue 4, pp. 271-278, 2001 (SCI/EI, ISI ranking 21/94=22% @ 2008, 25/92=27% @ 2007)
- 33. (2000) <u>Tong-Yee Lee</u>, Wen-Hsui Wang," Morphology-based Three-dimensional Interpolation," *IEEE Transactions on Medical Imaging*, Vol. 19, Issue 7, pp. 711-721, 2000 (SCI/EI, ISI ranking: 1/94=1% @2008, 1/92 = 1% @2007)
- 34. (1999) <u>Tong-Yee Lee</u>, Yung-Nein Sun, Y. C. Lin, Leewen Lin, C.N. Lee, "Three Dimensional Facial Model Reconstruction & Plastic Surgery Simulation," *IEEE Transactions on Information Technology in Biomedicine*, Vol. 3, No. 3, pp. 214-220, 1999. (SCI/EI, ISI ranking 21/94=22%@2008, 25/92=27%@2007)
- 35. (1999) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Chao-Hung Lin, Yung-Nein Sun, Xi-Zhang Lin, "Interactive 3D Virtual Colonoscopy System," *IEEE Transactions on Information Technology in Biomedicine*, Vol 03, No. 02, pp. 139-150, 1999. (SCI/EI, ISI ranking 21/94=22%@2008, 25/92=27%@2007)

36. (1996) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "Image Composition Schemes for Sort-Last Polygon Rendering on 2-D Mesh Multicomputers," Volume 2, Number 3 of the *IEEE Transactions on Visualization and Computer Graphics*, pp. 202-217, 1996. (SCI/EI, ISI ranking: 8/86 = 9% @ 2008, 11/84=13% @ 2007).

#### (b) Other International Journals

- (2010) Chao-Hung Lin, Min-Wen Chao, Chan-Yu Liang, <u>Tong-Yee Lee</u>, "A Novel Semi-blind-and-Semi-reversible Robust Watermarking Scheme for 3D Polygonal Models," *The Journal of Visual Computer* (special issue of Computer Graphics International (CGI) 2010 Conference 8-11, June, Singapore, 2010) Volume 26, Numbers 6-8, 1101-1111, (SCI/EI)
- (2009) Chih-Yuan Yao, Hung-Kuo Chu, Tao Ju, <u>Tong-Yee Lee</u>, "Compatible Quadrangulation by Sketching" *Computer Animation and Virtual Worlds Journal* Vol. 20, No. 2-3, June 2009, pp. 101-109(9) (a special issue of 22nd Annual Conference on Computer Animation and Social Agents, June 17-19, 2009 in "Het Trippenhuis", Amsterdam, the Netherlands) (SCI/EI)
- 3. (2009) Chung-Ren Yan, <u>Tong-Yee Lee</u>, "Texture Synthesis with Prioritized Pixel Re-synthesis," *Journal of Information Science & Engineering* Vol.25 No. 2, pp. 389-402, March, 2009, (SCI/EI)
- **4.** (2008) Yu-Shuen Wang, <u>Tong-Yee Lee</u>, ""Example-driven Animation Synthesis" *The Journal of Visual Computer* (selected as a special issue of CGI 2008, Graphics International 2008, accepting rate: 39/220=17%, Istanbul, Turkey, June 2008) (SCI/EI)
- (2008) Ping-Hsien Lin, Hung-Kuo Chu, <u>Tong-Yee Lee</u>, "Smooth Shape Interpolation for 2D Polygons," *International Journal of Innovative Computing, Information and Control* (IJICIC), Vol.4, No.9, September 2008, pp. 2405-2417. (SCI/EI)
- (2008) Yu-Shuen Wang, Chao-Hung Lin, <u>Tong-Yee Lee</u>, "Interactive Model Decomposition Using Protrusive Graph," *International Journal of Innovative Computing*, *Information and Control* (IJICIC), Vol.4, No.8, August 2008, pp. 1887-1896. (SCI/EI)
- 7. (2008) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Shao-Wei Yen, Ming-Te Chi, Zhi-Yuan Yao, Jin-Lung Lin, "Exaggeration Cloning From Example Sequence," (Invited paper) to appear *International Journal of Computer Sciences and Engineering Systems*, Volume 3 Number 4, pp. 307-313, 2009, (preliminary version appeared in CASA 2007, June 11th-13th, 2007, Belgium).
- 8. (2007) <u>Tong-Yee Lee</u>, Chao-Hung Lin, Hung-Kuo Chu, Yu-Shuen Wang, Shao-Wei Yen, Chang-Rung Tsai, "Mesh Pose-Editing Using Examples", *Computer Animation and Virtual Worlds Journal*, Volume 18, Issue 4-5 (September December 2007), pp. 235-245. (SCI/EI)

- 9. (2007) <u>Tong-Yee Lee</u>, Shaur-Uei Yan, "Texture Mapping on 3D Surfaces Using Clustering-based Cutting Paths," *International Journal of Computational Science and Engineering*, Volume 3 No 1, pp. 71-79, 2007 (EI)
- (2007) Ping-Hsien Lin, <u>Tong-Yee Lee</u>, and C. F. Lin, "Free-Form Deformation for Point-Sampled Surface," *Journal of Information Science & Engineering*, Vol. 23, No. 3 (May issue), pp.757-771, 2007. (SCI/EI)
- 11. (2006) <u>Tong-Yee Lee</u>, Zhi-Yuan Yao, Hung-Kuo Chu, Ming-Jen Tai, and Cheng-Chieh Chen," Generating Genus-n-to-m Mesh Morphing Using Spherical Parameterization", *Journal of Computer Animation and Virtual Worlds*, July, 2006, CAVW 17(3-4), pp. 433-443. (SCI/EI)
- 12. (2006) Chun-Rong Huang, Pau-Choo Chung, <u>Tong-Yee Lee</u>, Sheng-Chih Yang, San-Kan Lee, "Reconstruction and Rendering of Microcalcifications from Two Mammogram Views by Modified Projective Grid Space (MPGS)," *Computerized Medical Imaging & Graphics*, pp. 123-133. (SCI/EI)
- 13. (2006) <u>Tong-Yee Lee</u>, Yu-Shuen Wang , Tai-Guang Chen, "Segmenting a Deforming Mesh into Near-Rigid Components," *The Journal of Visual Computer* (special issue of The 14th Pacific Conference on Computer Graphics and Applications, (Pacific Graphics 2006, accepted rate = 17%) Vol. 22, No. 9-11, Sept. 2006, pp. 729-739 (SCI/EI)
- 14. (2005) <u>Tong-Yee Lee</u>, Chien-Chi Huang, "Dynamic and Adaptive Morphing of Three-dimensional Mesh Using Control Maps," *IEICE Trans. on Information and Systems*, March Issue, Vol. E88-D, No. 3, March, 2005, pp. 646-651. (SCI/EI)
- 15. (2005) <u>Tong-Yee Lee</u>, Han-Ying Lin, "New Surface Flattening Scheme and Its Application in the Visualization of the Human Cortex Unfolding," *Journal of the Chinese Institute of Engineers*, Vol. 28, No. 3, pp. 539-544, May 2005, (SCI/EI)
- 16. (2005) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Shaur-Uei Yan, Chun-Hao Lin, "Mesh Decomposition Using Motion Information From Animation Sequence," *Journal of Computer Animation and Virtual Worlds*, Vol. 16, No. 3-4, July, pp. 519-529, 2005, (SCI/EI)
- 17. (2005) Chao-Hung Lin, <u>Tong-Yee Lee</u>, Hung-Kuo Chu, Zhi-Yuan Yao, "Progressive Mesh Metamorphosis," *Journal of Computer Animation and Virtual Worlds*, Vol. 16, No. 3-4, July 2005, pp. 487-498, (SCI/EI)
- 18. (2003) <u>Tong-Yee Lee</u>, Hon-YI Chen, "The Design and Implementation of Realistic Fish Animation Play System Using Video Sequence," *Journal of Information Science & Engineering*, Vol. 19, No. 6, Nov. 2003, pp. 1071-1085. (SCI/EI)
- (2003) Ping-Hsien Lin, <u>Tong-Yee Lee</u>, "Three-dimensional Scene Walkthrough System Using Multiple Acentric Panorama View (APV) Technique," *IEICE Transactions on Information and Systems*, Vol.E86-D No.1 pp.117-122 2003/Jan. (SCI/EI)

- 20. (2001) <u>Tong-Yee Lee</u>, Chao-Hung Lin, "Growing-cube Iso-surface Extraction Algorithm For Medical Volume Data," *Computerized Medical Imaging and Graphics*. 25:5, page 405-415. (SCI/EI)
- 21. (2001) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Chao-Hung Lin," Practice and Experience: Interactive Rendering of Colonic Environment on PC-platform," *Journal of Information Science & Engineering*, Vol. 17, No. 2, March, 2001, pp. 297-312. (SCI/EI)
- (1999) <u>Tong-Yee Lee</u>, T.L, Weng, Y.N. Sun, ``Optimized Semi-boundary Rendering Scheme," *Journal of Information Science and Engineering*, Vol. 15, No. 6, pp. 845-858.
  (SCI/EI)
- 23. (1999) Leewen Lin, C.N. Lee, <u>Tong-Yee Lee</u>, "Distributed Volume Morphing," *Cluster Computing Journal* (The Journal of Networks, Software Tools and Applications) Vol. 2 No. 3, pp. 219-227 (SCI/EI).
- 24. (1999) <u>Tong-Yee Lee</u>, T. L. Weng, Chao-Hung Lin, Y. N. Sun, "Interactive Voxel Surface Rendering in Medical Applications," *Computerized Medical Imaging and Graphics*," 23 (1999) pp. 193-200. (SCI/EI)
- 25. (1998) <u>Tong-Yee Lee</u>, Y.C. Lin, L. Lin, Y.N. Sun, "Fast Feature-based Metamorphosis and Operator Design," **EuroGraphics'98**, *Computer Graphics Forum*, Volume 17, Number 3, pp. C15-22. (SCI/EI)
- 26. (1997) <u>Tong-Yee Lee</u> "Exploitation of Image Parallelism for Ray Tracing 3D Scenes on 2D Mesh Multicomputers," *Parallel Computing*, Vol. 23, No. 13, pp. 1993-2015, 1997. (SCI/EI)
- 27. (1997) Chungnan Lee, <u>Tong-Yee Lee</u>, S.F. Hsiao and T.C. Lu, "Performance Evaluation for Parallel Computing on Network Environment," *Journal of High Performance Computing Application*, Vol. 4, No. 1, pp. 25-35, 1997. (EI)
- 28. (1997) Tainchi Lu, Chungwen Chiang, Chungnan Lee, <u>Tong-Yee Lee</u>, "A Web-based Distributed and Collaborative 3D Animation Environment" *Concurrency: Practice and Experience*, 9:11, 1261-1268, 1997. (SCI/EI)
- 29. (1997) Chungnan Lee, <u>Tong-Yee Lee</u>, Tain-Chi Lu and Yao-Tsung Chen, "A World-Wide Web Based Distributed Animation Environment," *Journal of Computer Networks and ISDN Systems*, Vol. 29, No. 14, pp. 1635-1644, 1997. (SCI/EI)
- 30. (1997) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "Parallel Implementation of Ray-tracing Algorithm on the Distributed Memory Parallel Computers," *Journal Concurrency: Practice and Experience*, 9:10, 947-965. (SCI/EI)
- 31. (1997) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "Experimental Evaluation of Load Balancing Strategies for Ray Tracing on Parallel Processors," issue 4(4), *Integrated Computer-aided Engineering Journal*, pp. 260-275,1997 (SCI/EI)

#### (c) Local/Domestic Journals

- 1. (2002) <u>Tong-Yee Lee</u>, Y-H Yang, C.H, Chen, "Interactively Walking Through a 3D Virtual Environment using a Hierarchy of Views," (**Invited**) *Journal of Computers*, Vol 14, No. 1, March 2002 pp. 17-32.
- 2. (1998) <u>Tong-Yee Lee</u>, "The Hybrid Parallel Rendering Scheme for High Performance Graphics," (Invited) *Journal of Computers*, Vol. 10, No. 3. 12-19, 1998.
- 3. (1998) Tainchi Lu, Chungwen Chiang, Chungnan Lee, <u>Tong-Yee Lee</u>, "A Distributed and Collaborative Visual Environment for Rendering 3D Model Scenes," (Invited) *Journal of Computers*, Vol. 10, No. 3, pp. 20-33, 1998.

## **Book Chapters**

 (2005) <u>Tong-Yee Lee</u>, Chao-Hung Lin, "Shape based Interpolation Methods for medical images and their application," Volumes on "Medical Imaging Systems: Technology & Applications", Vol. 2, Dec. 2005, *World Scientific Press*, pp. 281-298.

## **International Conference Paper**

- (2010) Chao-Hung Lin, Min-Wen Chao, Chan-Yu Liang, <u>Tong-Yee Lee</u>, "A Novel Semi-blind-and-Semi-reversible Robust Watermarking Scheme for 3D Polygonal Models," Computer Graphics International (CGI) 2010 Conference 8-11, June, Singapore, 2010).
- 2. (2010) Huisi Wu, Yushuen Wang, Kun-Chuan Feng, Tien-Tsin Wong, <u>Tong-Yee Lee</u>, Pheng-Ann Heng, "Resizing by Summarization", Vol. 29, No. 6, Article No. 159, *ACM Transactions on Graphics* (also in Proceedings of SIGGRAPH Asia 2010 國際頂史重要會議), Seoul, 2010 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 3. (2010) YuShuen Wang, Hui-Chih Lin, Olga Sorkine, <u>Tong-Yee Lee</u>, "Motion-based Video Retargeting with Optimized Crop-and-Warp," *ACM Transaction on Graphics* (also in **Proceedings of SIGGRAPH 2010** 國際頂史重要會議), Vol. 29, No.3, Article No. 90, pp. 1-9, July 2010 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 4. (2010) Hung-Kuo Chu, Wei-Hsin Hsu, Niloy J. Mitra, Daniel Cohen-Or, Tien-Tsin Wong, Tong-Yee Lee, "Camouflage Images," ACM Transaction on Graphics (also in Proceedings of SIGGRAPH 2010 國際頂尖重要會議), Vol. 29, No.3, Article No. 51, pp. 1-8, July 2010 (SCI/EI, ISI ranking: 3/86 = 3%@2008,1/84=1%@2007)
- 5. (2009) YuShuen Wang, Hongbo Fu, Olga Sorkine, <u>Tong-Yee Lee</u>, and Hans-Peter Seidel, "Motion-Aware Temporal Coherence for Video Resizing," <u>Proceedings of SIGGRAPH Asia 2009</u> 國際頂尖重要會議, Dec. 2009.

- 6. (2009) Niloy J. Mitra, Hung-Kuo Chu, <u>Tong-Yee Lee</u>, Lior Wolf, Hezy Yeshurun, Daniel Cohen-Or, "Emerging Images," <u>Proceedings of SIGGRAPH Asia 2009</u> 國際項 尖重要會議, Dec. 2009.
- 7. (2009) Chih-Yuan Yao, Hung-Kuo Chu, Tao Ju, <u>Tong-Yee Lee</u>, "Compatible Quadrangulation by Sketching" *Computer Animation and Virtual Worlds Journal*, Vol. 20, No. 2-3, June 2009, pp. 101-109(9), (a special issue of 22nd Annual Conference on Computer Animation and Social Agents, June 17-19, 2009 in "Het Trippenhuis", Amsterdam, the Netherlands) (SCI/EI)
- 8. (2008) Oscar Kin-Chung Au, Chiew-Lan Tai, Hung-Kuo Chu, Daniel Cohen-Or, <u>Tong-Yee Lee</u>, "Skeleton Extraction by Mesh Contraction," <u>Proceedings of ACM SIGGRAPH 2008 國際頂尖重要會議</u>.
- 9. (2008) (2008) Ming-Te Chi, <u>Tong-Yee Lee</u>, Yingge Qu, Tien-Tsin Wong, "Self-Animating Images: Illusory Motion Using Repeated Asymmetric Patterns," ACM Proceedings of SIGGRAPH 2008 國際頂尖重要會議.
- 10. (2008) Yu-Shuen Wang, Chiew-Lan Tai, Olga Sorkine, <u>Tong-Yee Lee</u>, "Optimized Scale-and-Stretch for Image Resizing," <u>Proceedings of SIGGRAPH Asia 2008 全球頂</u> 尖重要會議
- 11. (2008) Jackie Assa, Daniel Cohen-Or, I-Cheng Yeh, <u>Tong-Yee Lee</u>, "Motion Overview of Human Actions," <u>Proceedings of SIGGRAPH Asia 2008</u> 全球頂尖重要會議
- 12. (2008) Yu-Shuen Wang, <u>Tong-Yee Lee</u>, Chiew-Lan Tai, "Focus+Context Visualization with Distortion Minimization," <u>Proceedings of IEEE Visualization 2008 全球頂</u>尖重要會議.
- 13. (2008) Yu-Shuen Wang, <u>Tong-Yee Lee</u>, ""Example-driven Animation Synthesis" Proceedings of **Graphics International 2008**, accepting rate: 39/220=17%, Istanbul, Turkey, June 2008)
- 14. **(2007)** Yu-Shuen Wang, <u>Tong-Yee Lee</u>, Chao-Hung Lin, "Interactive Model Decomposition," Proceeding of The 10th International Conference on Computer-Aided Design and Computer Graphics (*CAD/Graphics 2007* sponsored by **IEEE** and **ACM SIGGRAPH**), Beijing, China on October 15-18, 2007. (**EI**)
- 15. (2007) <u>Tong-Yee Lee</u>, Chao-Hung Lin, Hung-Kuo Chu, Yu-Shuen Wang, Shao-Wei Yen, Chang-Rung Tsai, "Mesh Pose-Editing Using Examples", Proceedings of International Conference on Computer Animation and Social Agents (CASA 2007), June 11th-13th, 2007, Belgium.
- 16. (2007) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Shao-Wei Yen, Zhi-Yuan Yao, Jin-Lung Lin, "Exaggeration Cloning," Proceedings of International Conference on Computer Animation and Social Agents (CASA 2007), June 11th-13th, 2007, Belgium.
- 17. (2007) <u>Tong-Yee Lee</u>, Chao-Hung Lin, Shao-Wei Yen, Hsun-Jen Chen, "A Natural Pen-and-paper like Sketching Interface for Modeling and Animation", Proceedings of

- International Conference on Computer Animation and Social Agents (CASA 2007), June 11th-13th, 2007, Belgium.
- 18. (2007) Yao-Yang Tsai, Hung-Kuo Chu, Kuangyou B. Cheng, <u>Tong-Yee Lee</u>, "Animation generation and retargeting based on physics characteristics," Proceedings of IEEE The third International Conference on Intelligent Information Hiding and Multimedia Signal Processing (Special Session on Computer Graphics), Nov. 26-28, 2007. (EI)
- 19. (2007) Yu-Shuen Wang, <u>Tong-Yee Lee</u>, "WYSIWYG: Mesh Decomposition for Static Models," Proceedings of IEEE The third International Conference on Intelligent Information Hiding and Multimedia Signal Processing (Special Session on Computer Graphics), Nov. 26-28, 2007. (EI)
- 20. (2006) <u>Tong-Yee Lee</u>, Yu-Shuen Wang, Tai-Guang Chen, "Segmenting a Deforming Mesh into Near-Rigid Components," Proceedings of The 14th Pacific Conference on Computer Graphics and Applications, (Pacific Graphics 2006, accepted rate = 17%)
- 21. (2006) C.-H. Lin, C-R Ran, J.-H.Hsu, <u>Tong-Yee Lee</u>, "Multiresolution Remeshing Using Weighted Centroidal Voronoi Diagram," Proceedings of Fifth <u>International Workshop on Computer Graphics and Geometric Modeling</u>, <u>CGGM 2006</u> (also in LECTURE NOTES IN COMPUTER SCIENCE 3992: 295-301 2006) Springer-Verlag, 2006 (<u>SCI/EI</u>).
- 22. (2006) <u>Tong-Yee Lee</u>, Zhi-Yuan Yao, Hung-Kuo Chu, Ming-Jen Tai, and Cheng-Chieh Chen," Generating Genus-n-to-m Mesh Morphing Using Spherical Parameterization", Proceedings of <u>International Conference on Computer Animation and Social Agents</u> (CASA 2006), Geneva, Switzerland, 2006.
- 23. (2006) <u>Tong-Yee Lee</u>, Ming-Te Chi, Chung-Ren Yan, Chiung-Fu Chen, Yen-Chi Lin, "Stylized Motion for 3D Character Rendering and Animation," Proceedings of ,International Conference on Computer Animation and Social Agents (CASA 2006), Geneva, Switzerland 2006,
- 24. (2006) Chung-Ren Yan ,<u>Tong-Yee Lee</u>, Chao-Hung Lin, "Patch-based Synthesis for Non-frontal-parallel Textures (NFPT)", Proceedings of International Conference on Innovative Computing, Information and Control, Beijing, IEEE CS Press 2006 (EI).
- 25. (2005) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Shaur-Uei Yan, Chun-Hao Lin, "Mesh Decomposition Using Motion Information From Animation Sequence," Proceeding of International Conference on Computer Animation and Social Agents (CASA 2005) Oct. 2005, Hong-Kong.
- 26. (2005) Chao-Hung Lin, <u>Tong-Yee Lee</u>, Hung-Kuo Chu, Zhi-Yuan Yao, "Progressive Mesh Metamorphosis," Proceeding of <u>International Conference on Computer Animation and Social Agents (CASA 2005)</u> Oct. 2005, Hong-Kong.

- 27. (2005) Kuo-Yu Lee, Hung-Kuo Chu, <u>Tong-Yee Lee</u>, "Adaptive Three-tiered Control Schemes for Large Multi-User Virtual Environments," Proceeding of <u>International Conference on Computer Animation and Social Agents (CASA 2005)</u> Oct. 2005, Hong-Kong.
- 28. (2005) <u>Tong-Yee Lee</u> and Chung-Ren Yan, "Feature-based Texture Synthesis," Proceeding of International Workshop on Computer Graphics and Geometric Modeling, Proceeding of International Conference on Computational Science and its Applications (ICCSA) 2005, Singapore, May 2005. (also in Lecture Notes on Computer Science (LNCS 3482) volume 3482, Springer-Verlag, pp. 1043-1049, 2005 (SCI/EI))
- 29. (2005) Ping-Hsien Lin and <u>Tong-Yee Lee</u>, " A Fast 2D Shape Interpolation Technique," Proceeding of International Workshop on Computer Graphics and Geometric Modeling, Proceeding of International Conference on Computational Science and its Applications (ICCSA) 2005, Singapore, May 2005. (also in Lecture Notes on Computer Science (LNCS 3482) volume 3482, Springer-Verlag, pp. 1050-1059, 2005(SCI/EI))
- 30. (2005) <u>Tong-Yee Lee</u>, Shaur-Uei Yan, "Feature-constrained Texturing System for 3D Models," Proceeding of International Workshop on Intelligent Information Hiding and Multimedia Signal Processing, September 14 16, 2005 Hilton Hotel Melbourne, Australia (also in Lecture Notes in AI 3683 Vol. Part III pp. 469-474 (LNCS/LNAI), Springer-Verlag, 2005 (SCI/EI))
- 31. (2005) <u>Tong-Yee Lee</u>, Shaur-Uei Yan, Yong-Nien Chen, Ming-Te Chi," Real-time 3D Artistic Rendering System," Proceeding of International Workshop on Intelligent Information Hiding and Multimedia Signal Processing, September 14 16, 2005 Hilton Hotel Melbourne, Australia (also in Lecture Notes in AI 3683, Vol. Part III pp. 456-462, (LNCS/LNAI), Springer-Verlag, 2005 (SCI/EI))
- 32. (2004) Tong-Yee Lee and Shaur-Uei Yan, "Texture Mapping on Arbitrary 3D Surfaces," International Workshop on Computer Graphics and Geometric Modeling, Proceeding of International Conference on Computational Science and its Applications (ICCSA) 2004, Italy, pp. 721-730, May 2004. (also in Lecture Notes on Computer Science (LNCS 3024), Springer-Verlag (SCI/EI))
- 33. (2004) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Tz-Hsien Yang, "Photo-realistic 3D Head Modeling Using Multi-view Images," **International Workshop on Computer Graphics and Geometric Modeling,** Proceeding of International Conference on Computational Science and its Applications (ICCSA) 2004, Italy, pp. 713-720, May 2004. (also in Lecture Notes on Computer Science (LNCS) 3044, Springer-Verlag, (SCI/EI))
- 34. **(2004)** Tong-Yee Lee, "Three-dimensional Polygon Morphing Techniques," Proceeding of International NICOGRAPH 2004 (Invited Speech).
- 35. (2003) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Y-H Yang, "A hybrid scheme for interactive rendering a virtual environment," Proceeding of International Workshop on

- **COMPUTER GRAPHICS and GEOMETRIC MODELING**, Canada, May 2003 Springer-Verlag (also in Lecture Notes in Computer Science LNCS 2669 Part III, pp. 285-294, May 2003 (SCI/EI))
- 36. (2003) Tong-Yee Lee, Chao-Hung Lin, Wen-Hsiu Wang, "Morphology-based 3D volume metamorphosis," Proceeding International Workshop on COMPUTER GRAPHICS and GEOMETRIC MODELING, Canada, May 2003 (also in Springer-Verlag Lecture Notes in Computer Science LNCS 2669 Part III, pp. 518-527, May 2003 (SCI/EI))
- 37. (2002) P-H Lin, <u>Tong-Yee Lee</u>, "APV Rendering," Proceedings of International Conference on Virtual Reality and Applications on Industry (VRAI 2002), April, China.
- 38. **(2001)** P-H Lin, <u>Tong-Yee Lee</u>, "Splatting Footprint Size Evaluation for Image-based Rendering Using Camera Sampling," **IEEE Proceedings of DMS, Workshop CG&VR**.
- 39. (2000) <u>Tong-Yee Lee</u>, C.H Lin, "Interactive Animation of 4D Medical Imaging," Proceedings of 2000 <u>IEEE EMBS International Conference on Information Technology Applications in Biomedicine</u>, pp. 232-237, Nov. 9-10, WA. DC, USA, 2000.
- 40. (1999) <u>Tong-Yee Lee</u>, Yung-Nein Sun, Tzu-Lun Weng, Yung-Ching Lin, "Applications of Morphing on Facial Model reconstruction and Surgical Simulation," Proceedings of <u>International Workshop on Advanced Image Technology</u> (IWAITI'99), Jan. 1999.
- 41. **(1999)** Y.N. Sun, S.C. Huang, F.J. Chen, C.Y. Yu, <u>Tong-Yee Lee</u>, "Identification of vessel contours from three dimensional magnetic resonance angiograms," **Proceedings of SPIE'99**.
- 42. **(1999)** <u>Tong-Yee Lee</u>, Chao-Hung Lin, "Growing-cubes Isosurface Extraction Algorithm," Proceedings of 1999 **Workshop on IEEE Distributed System Technologies & Applications**.
- 43. (1998) <u>Tong-Yee Lee</u>, Chao-Hung Lin, Ping-Hsien Lin, Yung-Nein Sun, "Interactive Walkthrough of Large Colonic Database," Proceedings of 1998 Computer Graphics Workshop (Joint workshop of ACM Symposium of VRST'98), Taipei, pp. 90-93.
- 44. (1998) <u>Tong-Yee Lee</u>, Ping-Hsien Lin, Chao-Hung Lin, Yung-Nein Sun, Xi-Zang Lin, "Interactive 3D Virtual Colonoscopy System," Proceedings of International Computer Symposium (ICS'98), Taipei, Dec. 1998.
- 45. **(1998)** Leewen Lin, C.N. Lee, <u>Tong-Yee Lee</u>, "Distributed Volume Morphing," Proceedings of **International Computer Symposium (ICS'98)**, Taipei, Dec. 1998.
- 46. **(1998)** Tong-Yee Lee, Y. C. Lin, L. Lin, Y. N. Sun, Aug. 1998, "Fast Feature-based Metamorphosis and Operator Design," Proceedings of **Eurographics'98**, Aug.
- 47. (1998) <u>Tong-Yee Lee</u>, Tain-Chi Lu, C.N. Lee, June 1998, "A Distributed and Collaborative Graphics Rendering System," Proceedings of **IEEE ICCE'98**.

- 48. **(1997)** T. L. Weng, <u>Tong-Yee Lee</u>, Y. N. Sun, "A Fast Volume Rendering for the Pelvis System," Proceedings of **SPIE '97**, Vol. 3335, pp. 20-27.
- 49. (1997) Y. N. Sun, <u>Tong-Yee Lee</u>, Yuh-Hwan Liu, T. L. Weng, "A Virtual Surgical Planning System," Proceedings of <u>Multimedia Technologies and Applications</u> Symposium, pp. 335-343.
- 50. (1996) <u>Tong-Yee Lee</u>, C.S Raghavendra, "A Practical Scheduling Scheme for Non-Uniform Loops on Distributed Memory Parallel Machines," Proceedings of Hawaii International Conference on System Sciences (HICSS-29), Jan. 1996, pp. 243-250.
- 51. (1996) Chungnan Lee, <u>Tong-Yee Lee</u>, Tain-chi Lu, "Comparsions of Load Balancing Strategies for Ray Tracing on Network Clustered Environment", Proceedings of International Computer Symposium (ICS'96), Taiwan, R.O.C.
- 52. (1996) <u>Tong-Yee Lee</u>, "Parallel Graphics Software Design," Proceedings of **International Computer Symposium (ICS'96)**, Taiwan, R.O.C.
- 53. (1996) C. N. Lee, <u>Tong-Yee Lee</u>, Tain-Chi Lu, Y. T. Chen, "The World-Wide Web Based Distributed Animation System," (extended version) <u>Proceedings of ComputGraphics'96</u>, Dec., 1996, France.
- 54. **(1995)** Tong-Yee Lee, C.S Raghavendra, J.B. Nicholas, "Parallel Implementation of Ray-tracing Algorithm on the Intel Delta Parallel Computer," Proceedings of 9th International Parallel Processing Symposium, Santa Barbara, CA, 1995, pp.668-692.
- 55. (1995) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "An Efficient Sort-Last Polygon Rendering Scheme on 2D Mesh Parallel Computers," Proceedings of **International Conference on Parallel Processing**, 1995, Vol. 3, pp. 9-16.
- 56. (1995) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "Image Composition Methods for Sort-Last Polygon Rendering on 2-D Mesh Architectures," **Proceedings of the 2nd Parallel Rendering Symposium**, 1995, pp. 55-62.
- 57. (1995) <u>Tong-Yee Lee</u>, ``Interactive Polygon Rendering on Message-passing Parallel Architectures," **Proceedings of High Performance Computing'95 Asia** Taipei, Taiwan, 1995.
- 58. (1995) <u>Tong-Yee Lee</u>, C.S Raghavendra, "Parallel Processing for Graphics Rendering on Distributed Memory Multicomputers," **Proceedings of International Conference on High Performance Computing**, Dec 27-30, 1995, Goa, India.
- 59. (1994) <u>Tong-Yee Lee</u>, J.B. Nicholas, ``A Scalable Parallel Ray Tracing Scheme on Parallel Machines," **Proceedings of Scalable High Performance Computing Conference**, May 23 25, 1994, Knoxville, TN.
- 60. (1994) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "A Scalable Parallel Ray Tracing Scheme on Parallel Machines," **Proceedings of Paragraph'94**, March, 24, Hagenberg, Austria.

- 61. **(1994)** <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "Experimental Evaluation of Load Balancing Strategies for Ray Tracing on Parallel Processors," **Proceedings of International Conference on Parallel Processing**, August 15-19, 1994, Illinois.
- 62. (1994) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, `` Load Balancing Strategies for Ray Tracing on Parallel Processors," **Proceedings of IEEE TENCON'94, IEEE Region 10's Ninth Annual International Conference**, 22-26 August, 1994, Singapore, pp. 177-181.
- 63. (1994) Tong-Yee Lee, C.S Raghavendra, J.B. Nicholas, "Visualization of Molecular Dynamics on a Remote Visualization Platform", **Proceedings of Graphics and Visualization Conference** (GViz'94), Sept. 4, 1994, Richland, WA, 1994.
- 64. (1993) <u>Tong-Yee Lee</u>, C.S Raghavendra, J.B. Nicholas, "A Fully Distributed Parallel Ray Tracing Scheme on the Delta Touchstone Machine," Proceedings of 2nd International Symposium on High Performance Distributed Computing, July, 1993, Spoken, WA, pp. 129-134.

#### **Patents**

- 虛擬海洋生物系統 (發明專利證號:305315, 公告日期:中華民國 98 年 01 月 11 日)
- US Provisional Patent Application No. 61/334,953, \Apparatus, systems, computer-accessible medium and methods for video cropping, temporally-coherent warping and retargeting" (Note: will be licensed to Walt Disney)
- 099-080EP-TW1 一種不等比例影像縮放之處理方法(PD 4293) 099127214 (pending)
- 099-080EP-TW2 一種顯示器之影片播放系統 (PD 4293-1) 099127215 (pending)
- 099-080EP-TW3 一種影片資料處理系統 (PD 4293-2)099127216 (pending)
- 099-080EP-TW4 一種觸控系統 (PD 4293-3) 099127217 (pending)
- 099-080EP-TW5 一種影片輸出格式系統 (PD 4293-4) 099127218 (pending)
- 099-080EP-TW6 一種不等比例影片縮放之圖像處理器 (PD4293-5) 099127219 (pending)