

Jiang-Yu Zheng

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1 Curriculum Vitae

1.1 Education

Undergraduate: BS in Computer Science, Fudan University, Shanghai, China (1983)
Graduate: MS in Control Engineering, Osaka University, Osaka, Japan (1987)
Ph.D. in Control Engineering, Osaka University, Osaka, Japan (1990)

1.2 Appointments

- 2011– present Professor, Dept. Computer Science, IUPUI
- 2001– 2010 Associate Professor, Dept. Computer Science, IUPUI
- 1994 –2001 Associate Professor, School of Computer Science and Systems Engineering, Kyushu Institute of Technology, Fukuoka, Japan
- 1993 – 1994 Assistant Professor, School of Computer Science and Systems Engineering, Kyushu Institute of Technology, Fukuoka, Japan
- 1990 –1993: (postdoc) Research Associate, ATR Communication Systems Research Laboratory, Advanced Telecommunication Research Institute, Kyoto, Japan

1.3 Other Appointments and Professional

- 2009: Guest Researcher at Professor Rank in NICT, Keihanna Research Laboratories, National Institute of Information and Communication Technology, Japan
- 2007: Invited Professor of Osaka University, Japan Institute of Scientific and Industrial Research, Osaka University, Japan
- Center for Visual Information Sensing and Computing, Dept. of Computer Science
- 2008-2010: Signature Center for Biocomputing, IUPUI
- 2008-2010: Transportation Active Safety Institute, IUPUI
- 2003-2006: Adjunct Professor at Beijing University, National Key Laboratory on Machine Perception, Beijing University, China
- 1999: Visiting Scholar at MSU, Computer Science and Engineering Department, School of

Engineering, Michigan State University

- 1996: Visiting Scholar at UCSD, Department of Electrical and Computer Engineering, School of Engineering, UCSD

1.4 Recognitions and Honors

2005 IEEE Senior Member (less than top 8% in 365,000 members)

2005 ACM VRST04 one of the five best papers (selecting rate 3%)

2004 Trustees Teaching Award, IUPUI

2000 Japan Art and Science Society Excellent Paper Award (Developing a graphics tool for extracting human motion from video, selecting rate 2%)

1991 Japan Information Processing Society Best Paper Award 90-91 (Research on generating the world first digital panoramic image, voted by the society at the first position from more than 250 papers published in the computer vision track in two years, selecting rate 0.4%)

2 Teaching

2.1 Regular Course

1. CS242 Computing for Engineering and lab (1 semester)
2. CS256 Advanced Programming (object oriented programming, 2 semesters)
3. CS300 System Programming (assembly and compiler, 4 semesters)
4. CS362 Data Structure and Algorithm (the most important CS gateway course for multiple departments, non-degree and degree graduate students, 11 semesters)
5. CS345 Multimedia Programming (6 semesters)
6. CS436 Analysis of Algorithm (1 semester)
7. CS470 Formal Language and Automata (4 semesters)
8. CS490 Explorations in Applied Computing (3 semesters)
9. CS590 Image Processing and Computer Vision (7 semesters)
10. CS590 Multimedia for Graduate (1 semester)

2.2 Students Advising, Research Supervision, and Student Evaluation

- Independent study courses offered: 29 undergraduate students, 24 graduate students.
- Advising eleven thesis graduate students (including two PhD students)
- Graduate student advisory committee: 26 students
- Selected as faculty mentor at three levels: (level1) 23, (level2) 11, and (level3) 3.

- Advising thesis graduate students in KIT, Japan: 27 students.

2.3 Curriculum Developments

- Graduate Course - Computer Vision and Image Processing (CS590) 2003
- Graduate Course - Multimedia (CS590), 2010
- Multimedia System Programming (CS435), 2003
- Participating activities in developing course series of mobile computing
- Received Course Development Grant: SBC (now ATT) Ameritech Fellow Program 12/02-12/03, for learning technologies using multimedia information processing, digital environment, and internet. 20 undergraduate students and 5 graduate students are involved

3 Professional Experience

3.1 Funding

External

1. Device of Digitizing 3D Impression Information, PIs: M. Tuceryan, J. Y. Zheng, National Institute of Justice, \$253,120, 2010-2011
2. International Exchange Program Award, J.Y. Zheng, National Institute of Information and Communication Technology, Japan, \$50,000, 2009.
3. Advanced In-car Video System, PI: H. Blitzer, co-Pis: M. Tuceryan, J. Y. Zheng, National Institute of Justice, \$270,000, 2008-2009.
4. Digital City Project, PI: J. Y. Zheng, Ritsumei University, Japan, 2008
5. CLIOH: A digital cultural library indexing out heritage, Institute of Museum and Library Services, (PI: M. Palakal, co-Pis, J. Y. Zheng, etc.), National Leadership Grant, \$249,855, 11/01/01–10/31/03.
6. Virtual Recovery and Exhibition of Heritage, PI: J. Y. Zheng, Grant from Asahi Foundation, 1998-2001
7. Digitalizing Historical Relic Archiving, PI: J. Y. Zheng, Japan Ministry of Education, Culture, Sports, Science and Technology, 1997-2000.
8. Fusing shapes from Xs, PI: J. Y. Zheng, Ogawa Foundation, 1994-1996
9. Industry Assembly in Virtual Environment, PI: N. Abe, Co-PI: J. Y. Zheng, Japan Ministry of Education, Science and Culture, 1997-2000
10. Acquiring Object Models from Rotating Images, PI: J. Y. Zheng, Japan Ministry of Education, Culture, Sports, Science and Technology, 1995-1998

11. Travel grants from ELEC Foundation, ECEI Foundation, ISJ (Foundation of Information Science in Japan), Alumni Association of Kyushu Institute of Technology, 1994-2000
12. Impression Information Processing, PI: J. Y. Zheng, Japan Ministry of Education, Culture, Sports, Science and Technology, 1994
13. Graduate Fellowship, from the Japan Ministry of Education, Culture, Sports, Science and Technology (government fellowship) 1984-1990

Internal (only in-rank at IUPUI included)

- International Development Grant, Indiana University, \$2500, 2009
- International Travel Grant, Indiana University, 2009
- Signature Center of Bio-computing (Member), 2007
- Interdisciplinary Assessment of the Indianapolis Cultural Trail, PI: G. Lindsey, J. Y. Zheng, J. Wilson, Service Learning Assistant Fund, Spring \$11,250, 2007
- Purdue University Research Fund Travel Grant, 2006
- Center for Visual Information Sensing and Computing (Co-PI, \$185,000), 2005
- Purdue University Research Fund Travel Grant, 2004
- Indiana University Travel Fund, 2004
- Acquiring and Representing Visual Data to Enhance Learning and Exploration, PI: J. Y. Zheng, SBC Ameritech Program, 12/02, 12/03, \$12,800, 2002
- Route Panorama for City Navigation, Purdue Summer Research Fund, \$7000, 6-7/2003,

3.2 Conference Program Committee Appointments and Paper Reviewing

- Director, Virtual Heritage Network, VSMM society, 2001
- VSMM2001, VSMM society, 25-27 Oct. 2001 Berkeley, USA
- Int. Conf. CGIM2001, IASTED, Aug. 12-14, 2001, Hawaii, USA
- Asian Conference on Computer Vision 06, 2006
- 12th International Conference on Virtual System and Multimedia (VSMM 2006)
- ACM Multimedia Conference 2007
- Asian Conference on Computer Vision 2007
- IAPR International Conference on Pattern Recognition 2008
- International Conference on Virtual Systems and Multimedia 2009
- OMNIVISION 2009
- IEEE International Conference on Multimedia and Exposition 2010

- IEEE International Conference on Robotics and Automation 2011 (associate editor)
- International Conference on Multimedia and Signal Processing 2011 (ICMP11)
- Journal of Computer Animation and Virtual Worlds (2010)
- IPSJ Transaction of Computer Vision and Applications (2008, 2010)
- IEEE/ACM Trans. on Computational Biology and Bioinformatics (2008)
- Journal of Visual Communication and Image Representation (2008-2010)
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- ACM SIGGRAPH 2006 (special issue of ACM Trans. of Graphics)
- IEEE Transactions on Intelligent Transportation System
- ACM Transaction on TOMCCAP 2006
- International Journal on Computer Vision
- IEEE Trans. on System, Machine, and Cybernetics
- Machine Vision Application
- Elsevier Journal: Transportation Research Part C: Emerging Technologies
- Journal of Graphical Model
- Transaction of Electric Information Electronic and Communication
- Sensors
- International Conference on VSMM 2006
- International Conference on Computer Graphics and Imaging
- ACM Symposium on Applied Computing
- Asian Conference on Computer Vision 2007
- 19th International Conference on Pattern Recognition, 2008
- International Conference on Virtual Systems and Multimedia 2009
- OMNIVISION 2009
- IEEE International Conference on Multimedia and Exposition 2010
- Book review: Visual Information Processing in Wireless Sensor Networks: Technology, Trends and Applications

3.3 Invited Talks (only in rank at IUPUI included)

- Image based rendering on city environment, Yamanashi University, Japan, 11/19/09.
- City information archive and distribution, National Institute of Information and Communication Technology, Japan, 6/30/09.

- Visual modeling of a large city space, Shanghai Jiao Tong University, China 3/16/2009
- Route panoramas for cityscape visualization, Dept. ECE, IUPUI, 1/29/2009.
- Scene archiving in digital city, Ritsumei University, Japan, 8/24/2007.
- Route panorama and its application in city navigation, Osaka University, Japan, 8/15/2007.
- Route panorama and image based city modeling, National Key Lab of Machine Perception, Beijing University, China, 6/12/2007.
- Image Based City Modeling and Visualization, Shanghai JiaoTong Uni., China, 11/20/2004
- Teaching and Learning with Technology, Indiana University/SBC Summer Leadership Forum, 5/20/2004
- Line sensor network detecting passing targets for surveillance, Final phase of the CCAT competition, UCSD, San Diego 1/13/2004
- “Digital Route Panoramas” Butler University, Indianapolis, IN 11/13/2003
- “Route Panoramas” at Geographical Information System Coordinating Meeting, broadcasting at IUPUI, Bloomington, IU Northwest, IU southeast Campus, IU southeast campus, 8/10/2003
- “Digital City with Visualization of Scenes”, Polis Center, Indiana University, IN 6/17/2003

3.4 Patents, Inventions

Patent Application (only at IUPUI included)

J. Y. Zheng (2001) Route panorama as a digital medium (Disclosed to ARTI)

4 Research Publications

Student author in italics, % indicates acceptance rate counted by the category of long/regular/oral or poster/short papers. DB: Double blind review

1. *J. Y. Zheng*, *H. Cai*, *K. Prabhakar*, IEEE International Conference on Multimedia and Exposition, 2011, 1-6 (30 % , DB)
2. *H. Cai*, *J. Y. Zheng*, Digesting omni-video along routes for navigation, ACM International Conference on Multimedia, 647-650, 2010 (29.13% , DB)
3. *A. Jazayeri*, *H. Cai*, M. Tuceryan, *J. Y. Zheng*, Smart video systems in police car, ACM International Conference on Multimedia, 807-810, 2010 (29.13%, DB)
4. Y. Kado, B. Zhang, *J. Y. Zheng*, Media Distribution via 2D Communication Sheet, ACM International Conference on Multimedia 2010, 1539-1542 (DB).
5. *H. Cai*, *J. Y. Zheng*, H. Tanaka, Acquiring shaking free route panorama by stationary blurring,

- IEEE International Conference on Image Processing, 2010, 921-924, HK (oral).
6. *A. Jazayeri, H. Cai, J. Y. Zheng, M. Tuceryan*, Motion based vehicle identification in car video, IEEE Symposium of Intelligent Vehicles, San Diego, 1-7, 2010 (oral 14%).
 7. *Y. Kado, B. Zhang, J. Y. Zheng*, Digital Scope on two dimensional Communication Sheet, IEEE International Conference on Multimedia and Exposition, Singapore, 1-6, 2010 (30%, *DB*).
 8. *J. Y. Zheng*, Line Cameras in Wireless Visual Sensor Networks, Visual Information Processing in Wireless Sensor Networks: Technology, Trends and Applications, Li-minn Ang and Kah Phooi Seng, Ed. IGI Global, 2010.
 9. *H. Cai, J. Y. Zheng*, Key view selection for large space visualization, Elsevier Journal of Visual Communication and Image Representation, Vol. 20, No. 6, 420-427, 2009
 10. *M. Chitnis, Y. Liang, J. Y. Zheng, P. Pagano, G. Lipari*, Inter. Workshop on Modeling Analysis and Simulation of Wireless and Mobile System, 6th ACM Sympo. Performance Evaluation of Wireless ad hoc, Sensor, and Ubiquitous Networks, 71-78, 2009 (oral).
 11. *J. Y. Zheng, B. Zhang, H. Cai*, Pervasive scene map on wireless devices for city navigation, NiBS 2009, Indianapolis, 75-82, 2009 (oral).
 12. *A. Jazayeri, H. Cai, J. Y. Zheng, M. Tuceryan, H. Blitzer*, An intelligent video system for vehicle localization and tracking in police cars, ACM Symposium on Applied Computing, 939-940, Hawaii, 2009 (*DB*).
 13. *J. Y. Zheng*, Scene Map on Wireless Mobile Platform, ACM Symposium on Applied Computing, Hawaii, 217-218, 2009 (*DB*).
 14. *J. Y. Zheng, M. Shi*, Scanning depth of route panorama based on stationary blur, International Journal of Computer Vision, Vol.78, No. 2-3, 169-186, June 2008. (*Top one impact factor 5.358 in 94 journals of AI area of computer science for last five years*)
 15. *J.Y. Zheng, Y. Bhupalam, H. Tanaka*, Understanding Vehicle Motion via Spatial Integration of Intensities, 18th Inter. Conf. Pattern Recognition 08, Tempo, 1-5, (oral 18%).
 16. *H. Cai, J. Y. Zheng*, Locating key views for image indexing of spaces, ACM International Conference on Multimedia Indexing and Retrieval, Vancouver, Canada, 31-38, 2008 (oral 21%, *DB*).
 17. *J. Y. Zheng, X. Wang*, Streaming Route Panorama for Seamless City Indexing and Guidance, International Journal of Computers and Applications, Vol.30, No.3, 192-200, 2008
 18. *J. Y. Zheng, X. Wang*, View evaluation and acquisition for cityscape archiving, 8th Asian Conference on Computer Vision, 303-313, Tokyo, 2007 (32%, *DB*).
 19. *J. Y. Zheng, M. Shi*, Depth from stationary blur with adaptive filtering, 8th Asian Conference on

- Computer Vision, 42-52, Tokyo, 2007 (32%, *DB*).
20. *G. Flora, J. Y. Zheng*, Adjusting route panoramas with condensed image slices, ACM Multimedia Conference 07, Augsburg, Germany, 815-818, 2007 (27%, *DB*)
 21. *J. Y. Zheng, S. Sinha*, Line cameras for monitoring and surveillance sensor networks, ACM Multimedia Conference 07, Augsburg, Germany, 2007, 433-442. (oral 20%, *DB*)
 22. *J. Y. Zheng, M. Shi*, Removing temporal stationary blur in route panorama, 17th Inter. Conference on Pattern Recognition, HK, Vol. 3, 709-713, 2006 (42%, *DB*).
 23. *J. Y. Zheng, S. Li*, Employing a Fish-eye for Scene Tunnel Scanning, 7th Asian Conference on Compute Vision, Vol. 1, 509-518, 2006 (30%, *DB*)
 24. *J. Y. Zheng, Y. Zhou, P. Mili*, Scanning scene tunnels for city traversing, IEEE Trans. Visualization and Computer Graphics, Vol. 12, No. 2, 155-167, 2006.
 25. *J. Y. Zheng, X. Wang, Y. Dai*, A web based city navigation application utilizing the mobile grid, *Advanced Parallel and Distributed Computing*, Chapter 15, 287-300, Nova Science Publishers, New York, 2006.
 26. *J. Y. Zheng*, Enhance visualization in GIS with route panoramas, Journal of Remote Sensing, Vol. 10, No. 3, 397-408, 2006.
 27. *J. Y. Zheng, M. Shi*, Mapping cityscapes to cyber world for visualization, Journal of Computer Animation and Virtual World, Vol. 16, no. 2, 97-107, May, 2005.
 28. *J. Y. Zheng, X. Wang*, Pervasive views: Area exploration and guidance using extended image media, ACM Multimedia 05, Singapore, 986-995, 2005 (oral 15.7%, *DB*).
 29. *M. Shi, J. Y. Zheng*, A slit scanning depth of route panorama from stationary blur, IEEE Computer Vision and Pattern Recognition 05, Vol.1, 1047-1054, 2005 (23%, *DB*).
 30. *Z. H. Zheng, J. Y. Zheng*, Image Compression and Coding, *Technological Bases of Digital Television*, X. Hui, Z. Zheng Ed., Chapter: 63-111, Publishing House of Electronics Industry, Beijing, 2005.
 31. *J. Y. Zheng*, Stabilizing Route Panoramas, 17th International Conference on Pattern Recognition, Cambridge, 348-351, UK, 2004. (35%, *DB*)
 32. *J. Y. Zheng, Y. Zhou, M. Shi*, Scanning and rendering scene tunnel for virtual city traversing, ACM Symposium on Virtual Reality Software and Technology (VRST04), 106-113, 2004. (oral 26%, *DB*)
 33. *J. Y. Zheng, Y. Zhou, M. Shi*, Scene tunnels for seamless virtual tour, the 12th annual ACM Conference on Multimedia 04, New York, 448-451, 2004. (44%, *DB*)
 34. *J. Y. Zheng, X. Wang, M. Shi*, Streaming route panoramas for large area visualization, IEEE 6th

- Inter. Symp. on Multimedia Software Engineering, 248-255, 2004 (oral).
35. *X. Wang, J. Y. Zheng, M. Shi*, Seamless visual guidance of virtual and real trips, International Conference on CyberWorlds 04, 30-37, 2004 (oral 24%).
 36. *J. Y. Zheng, X. Wang, M. Shi*, Culture Cross Roads, International Conference on Cyberworlds 04, 121-126, 2004 (53%)
 37. *J. Y. Zheng, Y. Zhou, X. Wang, M. Shi*, From route panorama to virtual city, 10th International Conference on Virtual System and Multimedia, 1058-1067, 2004 (oral).
 38. *M. Shi, J. Y. Zheng, M. Kato*, 3D Street model generation from route panoramas for culture heritage, 10th Intern. Conf. Virtual System and Multimedia, 644-653, 2004 (oral).
 39. *J. Y. Zheng, M. Shi*, Mapping Cityscapes to Cyber Space, IEEE/ACM International Conference on Cyberworlds 03, Singapore, 166-173, 2003 (oral 25%)
 40. *J. Y. Zheng, M. Shi, M. Kato*, Route Panoramas for City Navigation, ACM Multimedia 03, Berkeley, 108-109, 2003 (poster and demo).
 41. *M. Shi, J. Y. Zheng*, Resolution Analysis of Route Panorama, IEEE International Conference on Image Processing, Barcelona, Spain, 10-14, 2003 (oral).
 42. *J. Y. Zheng*, Digital Route Panorama, IEEE Journal on Multimedia, Vol. 10, No. 3, July-Sept. 57-67, 2003.
 43. *K. Uehara, K. Tanaka, N. Abe, J. Y. Zheng*, Construction of Virtual Archaeological Museum, 7th Intern. Conf. on Virtual Systems and Multimedia, 289-298, 2001 (oral).
 44. *J. Y. Zheng*, Virtual Recovery and Exhibition of Heritage, IEEE Multimedia, Vol. 7, No. 2, April-June, 31-34, 2000.
 45. *J. Y. Zheng*, A flexible laser range sensor based on Spatial-temporal analysis, 15th International Conference on Pattern Recognition, Vol. 4, 740-743, 2000.
 46. *J. Y. Zheng, S. Suezaki, Y. Shiota*, Interactive Human Motion Acquisition from Video Sequences, Computer Graphics International 2000, 209-217, 2000 (oral).
 47. *J. Y. Zheng, S. Suezaki, Y. Siota*, Semi-automatic Human Motion Extraction from Video, 4th Asian Conference on Computer Vision, Vol.1, 29-34, 2000 (oral).
 48. *J. Y. Zheng, A. Murata*, Acquiring A Complete 3D Model from Specular Motion under the Illumination of Circular-shaped Light Sources, IEEE Transaction on Pattern Analysis and Machine Intelligence, Vol. 22, No. 8, 913-920, Aug. 2000.
 49. *J. Y. Zheng, Z. L. Zhang*, Virtual Recovery of Excavated Relics. IEEE Computer Graphics and Application, Vol. 19, No. 3, 6-11, 1999
 50. *J. Y. Zheng, S. Tsuji*, Generating Dynamic Projection Images for Scene Representation and

- Understanding, Computer Vision and Image Understanding, Academic Press, Vol. 72, No. 3, December, 237-256, 1998.
51. K. Tanaka, *T. Tomooka*, J. Y. Zheng, N. Abe, S. J. He, H. Taki, Assembly illustration understanding referring to both models of mechanical parts and explanation, Journal of Japanese Society for Artificial Intelligence Vol. 13, No. 2, 263-273, 1998.
 52. J. Y. Zheng, *A. Murata*, Digitization and Virtual Recovery of Damaged Archaeological Finds, Transactions of the Institute of Electronics, Information, and Communication Engineers, Vol. J81-D-II, No. 5, 1035-1038, 1998.
 53. K. Tanaka, N. Abe, J. Y. Zheng, Understanding an instruction manual of mechanical assembly by manipulating 3D technical illustration in virtual space, International Conference on Virtual Systems and Multimedia 98, Vol. 2, 654-660, 1998.
 54. J. Y. Zheng, Z. L. Zhang, Digitizing and virtual recovering excavated relics in a world heritage site, International Conf. on Virtual Systems and Multimedia 98, 1998 (oral).
 55. J. Y. Zheng, *S. Suezaki*, A Model Based Approach in Extracting and Generating Human Motion, 14th International Conf. Pattern Recognition, Vol. 2, 1201-1205, 1998 (oral).
 56. J. Y. Zheng, Z. L. Zhang, Digital Archiving of an Archaeological Excavation Site for Multimedia Display, 14th Inter. Conf. Pattern Recognition, Vol.2, 1492-1496, 1998 (oral).
 57. J. Y. Zheng, Z. L. Zhang, N. Abe, Virtual Recovery of Excavated Archaeological Finds, IEEE Multimedia Systems Conference 98, 1998 (oral).
 58. J. Y. Zheng, *A. Murata*, N. Abe, Generating 3D Models of Objects Using Multiple Visual Cues in Image Sequences, 3rd Asia Conf. Computer Vision, vol.2, 487-494, 1998 (oral).
 59. J. Y. Zheng, *A. Murata*, Acquiring 3D Object Models from Specular Motion Using Circular Lights Illumination, 6th International Conference on Computer Vision, 1998 (<30%)
 60. N. Abe, *Y. Watanabe*, K. Tanaka, S. J. He, J. Y. Zheng, H. Taki, Y. Kinoshita, A. Yokota, Virtual Reality Based System for Relics Restoration, International Conference on Virtual Reality and Tele-Existence 97, 122-128, 1997 (oral).
 61. S. J. He, *Y. Kawamura*, K. Tanaka, J. Y. Zheng, N. Abe, H. Taki, A Virtual Reality Based System for Exterior Design, International Conference on Virtual Reality and Tele-Existence 97, 192-199, 1997, (oral).
 62. N. Abe, *T. Amano*, K. Tanaka, J. Y. Zheng, S. J. He, H. Taki, A Training System of Detecting Novice's Erroneous Operation in Repairing Virtual Machines, International Conference on Virtual Reality and Tele-Existence 97, 224-229, 1997, (oral).
 63. N. Abe, *A. Wada*, K. Tanaka, J. Y. Zheng, S. J. He, H. Taki, Verification of Assembly of

- Mechanical Parts and Visualization of Machinery of Assembly in Virtual Space, International Conference on Virtual Reality and Tele-Existence 97, 208-215, 1997(oral).
64. N. Abe, Y. *Watanabe*, K. Tanaka, J. Y. Zheng, S. J. He, H. Taki, Y. Kinoshita, A. Yokota, Relics Restoration by Using Virtual Reality Technologies, International Conf. on Computational Intelligence and Multimedia Applications, 673-678, 1997, (oral).
 65. N. Abe, K. Tanaka, J. Y. Zheng, S. J. He, H. Taki, A system for understanding mechanical instruction manual, Inter. Joint Conf. Artificial Intelligence 97 poster, 1997.
 66. J. Y. Zheng, Y. *Fukagawa*, N. Abe, 3D Surface Estimation and Model Construction from Specular Motion in Image Sequences, IEEE Transaction on Pattern Analysis and Machine Intelligence, Vol. 19, No. 5, 513-520 (1997).
 67. T. *Ohtsuka*, J. Y. Zheng, K. Tanaka, N. Abe, Multiple visual features identification and integration for 3D recovery of rotating objects. Trans. of the Institute of Electronics, Information, and Communication Engineers, Vol.J80-D-II, No.9, 2324-2332, 1997.
 68. A. *Murata*, J. Y. Zheng, Y. *Fukagawa*, N. Abe, Recovering 3D models from highlight motion using multiple circular lights, Transactions of the Institute of Electronics, Information, and Communication Engineers, Vol. J80-D-II, No. 7, 1659-1667, 1997.
 69. K. Tanaka, S. *Wada*, J. Y. Zheng, N. Abe, S. J. He, H. Taki, A System for Verification of Assembability of Mechanical Parts and Visualization of Machinery of Assembly in Virtual Space, Trans. on Information Processing Society of Japan, Vol.38, No.10, 1976-1985, 1997.
 70. Y. *Fukagawa*, J. Y. Zheng, K. Tanaka, N. Abe, Recovering 3D models from highlight motion, Transactions of the Institute of Electronics, Information, and Communication Engineers, Vol. J79-D-II, No. 5, 719-726, 1996.
 71. N. Abe, J. Y. Zheng, K. Tanaka, S. J. He, Integration of Language and Image processing for Assembly Instruction Manual Understanding, International Symposium on Artificial Intelligence, ISAI/IFIS, 135-140, 1996, (oral).
 72. J. Y. Zheng, T. Sakai, N. Abe, Guiding Robot Motion Using Zooming and Focusing, IEEE/RSJ Inter.I Conf. Intelligent Robots and Systems, Vol.3, 1076-1082, 1996, (oral).
 73. N. Abe, J. Y. Zheng, K. Tanaka, Virtual Machines for Teaching Assembling /Disassembling Operations to Novices, IEEE International Conference on Systems, Man and Cybernetics, Vol.3, 2096-2101, 1996, (oral).
 74. J. Y. Zheng, Constructing a 3D Object Model from Multiple Visual Features, IEEE International Conf. on Systems, Man and Cybernetics, Vol.4, 2457-2461, 1996 (oral).
 75. J. Y. Zheng, H. *Kakinoki*, K. Tanaka, N. Abe, Computing 3D Models of Rotating Objects from

- Moving Shading. 13th Inter. Conf. Pattern Recognition, Vol.1, 800-804, 1996.
76. J. Y. Zheng, *A. Murata, Y. Fukagawa*, N. Abe, Reconstruction of 3D Models from Specular Motion Using Circular Lights, 13th International Conference on Pattern Recognition, Vol. 1, 869-873, 1996 (oral).
 77. J. Y. Zheng, *T. Sakai*, N. Abe, Controlling of robot motion by means of zooming and focusing, 2nd Asia Conference on Computer Vision, Vol.1, 116-120, 1995 (oral).
 78. J. Y. Zheng, Constructing a visual memory in terms of uniqueness, 2nd Asia Conference on Computer Vision, Vol. 1, 292-296, 1995 (oral).
 79. J. Y. Zheng, *Y. Fukagawa*, N. Abe, Shape and Model from Specular Motion, 5th International Conference on Computer Vision, 92-97, 1995 (oral 20%).
 80. J. Y. Zheng, *H. Kakinoki*, K. Tanaka, N. Abe, Acquiring 3D models from fixed points during rotation, 3rd International Conference on Automation, Robotics, and Computer Vision, Vol. 1, 459-463, 1994 (oral).
 81. J. Y. Zheng, *Y. Fukagawa, T. Ohtsuka*, N. Abe, Acquiring 3D models from rotation and a highlight. 12th Inter. Conf. on Pattern Recognition, Vol. 1, 331-336, 1994 (oral).
 82. J. Y. Zheng, Acquiring 3D models from sequences of contours. IEEE Transaction on Pattern Analysis and Machine Intelligence, Vol. 16, No. 2, 163-178 (1994), (*161 citations searched from Google scholar with: J.Y. Zheng*)
 83. J. Y. Zheng, Q. Chen, S. Tsuji, F. Kishino, Employing an active camera for eye-hand coordination in robot manipulation, Transactions of the Institute of Electronics, Information, and Communication Engineers, Vol. J77-D-II, No.2, 331-342, (1994). (*selected in American Magazine of Computer and Systems in Japan*)
 84. J. Y. Zheng, F. Kishino, Recovering 3D models from silhouette sequence and detecting unexposed regions. Transactions of the Institute of Electronics, Information, and Communication Engineers, Vol. J76-D-II, No. 6, 1114-1122 (1993). (*selected in American Magazine of Computer and Systems in Japan*)
 85. J. Y. Zheng, S. Tsuji, Panoramic Representation for route recognition by a mobile robot, International Journal of Computer Vision, Vol. 9, No.1, 55-76, (1992). (*over 180 citations searched from Google Scholar with: J.Y. Zheng*)
 86. J. Y. Zheng, S. Tsuji, Successive environment perception using spatial matching by a mobile robot, Transactions of the Institute of Electronics, Information, and Communication Engineers, Vol. J71-D No.9, 1682-1692, 1988
 87. J. Y. Zheng, F. Kishino, 3D model from Contours: Further identification of unexposed areas, 11th

- International Conf. on Pattern Recognition, Vol. 1, 349-353, 1992 (oral).
88. J. Y. Zheng, F. Kishino, Verifying and combining different visual cues into a complete 3D model, IEEE Computer Vision and Pattern Recognition, 777-780, 1992
 89. J. Y. Zheng, Q. Chen, F. Kishino, S. Tsuji, Active camera controlling for manipulation, IEEE Conference on Computer Vision and Pattern Recognition, 413-418, 1991 (oral).
 90. J. Y. Zheng, M. Nagashima, F. Kishino, 3D face modeling using continuous aspect views, Picture Coding Symposium 91, 259-261, 1991 (oral).
 91. J. Y. Zheng, M. Barth, S. Tsuji, Landmark detection for route recognition by a mobile robot, IEEE Inter. Conf. on Robotics and Automation (1991), Vol. 3, 2004-2009 (oral).
 92. J. Y. Zheng, Q. Chen, S. Tsuji, Active camera guided manipulation. IEEE International Conference on Robotics and Automation, Vol. 1, 632-638, 1991 (oral).
 93. J. Y. Zheng, M. Barth, S. Tsuji, Qualitative route scene description using autonomous landmark detection, 3rd International Conf. on Computer Vision, 558-562, 1990 (poster).
 94. J. Y. Zheng, S. Tsuji, Panoramic representation of scenes for route understanding, 10th International Conference on Pattern Recognition, Vol.1, 161-167, 1990 (oral).
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