Pizzanu Kanongchaiyos, Ph.D.

Assistant Professor Head of Computer Graphics Lab (http://www.cp.eng.chula.ac.th/cg) Department of Computer Engineering Faculty of Engineering Chulalongkorn University

18-Phyatai Road, Patumwan, Bangkok, Thailand 10330 TEL 66(2)218-6964 FAX 66(2)218-6955



Research Interests

Computer Graphics and Its Applications Computer Animation Computer Aided Design System Information Design Computer Vision and Image Processing Visualization

Education

Ph.D. (Information Science) Computer Graphics Laboratory, Department of Information Science, Graduate School of Science, University of Tokyo

Teaching Experience

Full-time Lecturer at Chulalongkorn University

- 2110327 Algorithm Analysis and Design
- 2110333 Event Driven Programming
- 2110479 Computer Graphics
- 2110497 Special Topic in Computer Engineering (Game Programming)
- 2110512 Computer Animation
- 2110606 Research Methods in Computer Engineering
- 2110697 Special Topic of Topology in Multimedia
- 2110779 Advance Topic in Computer Graphics
- 2143203 Fundamental Data Structure and Algorithm
- 2143478 Graphic Computing

Course at Mahidol University

- Computer Animation
- Human Computer Interface

Course at Shinawatra University

• Computer Graphics and Multimedia

Course at University of Thai Chamber of Commerce

- Algorithm Design
- Computer Animation

Course at Dhurakij Pundit University

• PA556 -- Management Information System

Course at Sirindhorn International Institute of Technology

• Computer Animation

Course at Kasetsart University

Software Systems Design

Course at Thai-Nichi Institute

• Computer Graphics

Other Teaching Experience

In addition to the academic teaching experience above, I have also taught some short-courses and tutorials on programming techniques for rendering, and various CG related research topics for the following universities and professional organizations.

- Mahidol University
- Kasetsart University
- Thammasat University
- Rungsit University
- National Electronics and Computer Technology Center (NECTEC)
- Software Industry Promotion Agency (SIPA)

Publications

- 6 journal articles indexed in International Database (SCOPUS, ISI)
- 5 journal articles indexed in Thailand Citation Index (TCI) Center Database
- 48 conference articles indexed citation database (IEEE, ACM, ISI proceedings, SCOPUS, etc)
- 15 non-English conference articles published in conference proceedings

Professional Activities

- 8 Tutorials in computer graphics and animation
- 12 Invited Talks on national and international events on CG and Animation
- Committee member of IEEE Thailand and ACM SIGGRAPH Bangkok Chapter
- Member of Editorial board of Engineering Journal
- Member of 5 curriculum committee boards for 5 Thai universities
- Member of 13 committee and reviewer boards for International conferences and seminars in computer science and engineering
- IT Columnist in The "Daily News" newspaper (1001 column)

Grants, Honors and Awarded

- 11 scholarships and research funds granted by national institutes and organizations
- More than 20 awards for team coaching from national and international ICT competitions and contests
- Several interviewed on TV and newspapers on CG-related topics

Tutorial List

• "White Paper on Thailand Digital Content Industry Workshop" granted by SIPA, Ministry of ICT, Thailand, Retrieved October 15, 2005 from Chulalongkorn University, Department of Computer Engineering Web site:

http://www.cp.eng.chula.ac.th/cg/sipa/Document/White%20paper_Digital%20content.pdf

• "Animation Engineering" Retrieved October 15, 2005 from Chulalongkorn University,

Department of Computer Engineering Web site:

http://www.cp.eng.chula.ac.th/service/journals.php

• "CG in Engineering" Retrieved March 15, 2006 from Chulalongkorn University, Department of Computer Engineering Web site: http://www.cp.eng.chula.ac.th/service/journals.php

• "Computer Graphics, Fall 2003 (Thai Language)", Translated Courseware from Frédo Durand and Barb Cutler (2003)," Computer Graphics, Fall 2003" MIT OpenCourseWare, 2006.

• "Ray Tracing: Realistic Rendering via OpenGL." Retrieved March 22, 2006 from CUCG Society Web site: http://www.cp.eng.chula.ac.th/cg/

• "Scene and its components" Retrieved March 22, 2006 from CUCG Society Web site: http://www.cp.eng.chula.ac.th/cg/

• "Basics of Ray Tracing" Retrieved March 22, 2006 from CUCG Society Web site:

http://www.cp.eng.chula.ac.th/cg/

• "Practical Use and Discussion of Ray Tracing" Retrieved March 22, 2006 from CUCG Society Web site: http://www.cp.eng.chula.ac.th/cg/

Invited Talks List

• "Ethics, Legal and Social Issues in Computer Graphics", ICT Seminar, Rungsit University, May 5th, 2011.

• "Research topics in Computer Graphics", 3rd Prince Songkla University Research Conference (2010), November 17th -19th, 2010.

• "Current Trends in Computer Graphics", International Conference on Knowledge and Smart Technologies (KST2009), July 24-25, 2009.

 "CG Research in Thailand", The 2008 (7th) International Conference of the Nippon Computer Graphics Association (NICOGRAPH International'08), Jomtien Palm Beach Hotel and Resort, Pattaya City, Chonburi, May 30th -31st, 2008
"CG Research Trend in SIGGRAPH 2007", Doctoral Seminar at Department of Computer

Engineering, Faculty of Engineering, Kasetsart University, January 2008.

• "CG Trend from SIGGRAPH 2006", Seminar at CG & Animation Pavillion, COMWORLD THAILAND COMCREATIVE 2006, Royal Paragon hall, organized by SIPA and Ministry of ICT.

• "State-of-the-art in CG Research", CS Seminar Course, Kasetsart University, February 2006.

• "Digital Content in Educational Purpose" Thailand Animation and Multimedia 2005, Ministry of ICT, January 15, 2006.

• "CG Techniques in Digital FX," Seminar Course, Chulalongkorn University, January 2006.

- "Reeb Graph and Its Applications", CS Seminar Course, Mahidol University, 2005
- "Game Development in Thailand", Thailand Animation and Multimedia 2005, Ministry of ICT, January 15, 2005.
- "Topological Modeling", CS Graduate Student Seminar, Thammasat University, 2004

Professional Activities List

- Student Activity Chair of IEEE Thailand (since 2010)
- Managing Editor for Engineering Journal, ISSN 0125-8281: http://www.ej.eng.chula.ac.th/ (since 2009)

- Member of Curriculum Committee for Computer Science program at Chulalongkorn University (since 2010)
- Member of Curriculum Development Committee for Computer Animation program at Ratchaphruek College (2010)
- Member of Curriculum Development Committee for Computer Animation program at Sripatum University (2007)
- Member of Committee for Thailand Best PC-Game Award in Thailand Animation and Multimedia 2007.
- Invited speaker for Thailand Animation and Multimedia, January 2006.
- Selected to participate in the Digital Art Gallery of Thailand Animation and Multimedia, January 2006.

• Member of Curriculum Quality Assurance Committee for Computer Animation and Game Engineering Program at Dhurakij Pundit University (since 2005)

• Member of Curriculum Development Committee for Computer Animation program at University of Thai Chamber of Commerce (2005)

• Member of Reviewer Committee for Computer Graphics Educational Materials Source (CGEMS), http://cgems.inesc.pt/Default.aspx (2005)

- Member of Administrative Committee for Bangkok ACM SIGGRAPH (since 2005)
- Invited speaker for Thailand Animation and Multimedia, January 2005.
- Invited to serve as program moderator for Seminar Session of Thailand Animation and Multimedia, January 2005.

Program Committee & Reviewer List

• The Joint International Symposium on Natural Language Processing and Agricultural Ontology Service 2011 (SNLP-AOS 2011). December 7-8, 2011

• The 2011 International Conference of information technology, Computer Engineering and Management Sciences, Nanjing, China September 24- 25, 2011.

•The 2011 International Computer Science and Engineering Conference, Kasetsart University, September 8-9, 2011.

• The 8th ACM SIGGRAPH international Conference on Virtual-Reality Continuum and Its Applications in industry, Japan, December 14 - 15, 2009

• The 11th National Computer Science and Engineering Conference (NCSEC 2007), 19-21 November 2007, Miracle Grand Convention Hotel, Bangkok, Thailand.

• The 1st Symposium on Thai Biomedical Engineering (ThaiBME2007), 18-19 December 2007, Rangsit University, Bangkok, Thailand.

• The 3rd International Conference on Computer Graphics, Animation and Multimedia (GRAMM2007), 2-4 May 2007, Sofitel Raja Orchid Hotel, Khon Kaen, Thailand.

- The 4th International Conference on Computer Graphics and Interactive Techniques in Australasia and South-East Asia, 29 November 2 December 2006 in Kuala Lumpur, Malaysia.
- The 10th National Computer Science and Engineering Conference 2006, 25-27 October in Khon Kaen, Thailand.
- The 3rd Joint Conference on Computer Science and Software Engineering, June 28-30, 2006, King Mongkut's Institute of Technology North Bangkok, Bangkok, THAILAND.
- National Workshop for Digital Content Industry by SIPA and Ministry of ICT, May 8, 2006, Bangkok Thailand.

• The 2006 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS) and Robotics, Automation & Mechatronics (RAM) (CIS-RAM 2006), 7 - 9 June 2006 in Bangkok, Thailand.

• The 2nd Joint Conference on Computer Science and Software Engineering; JCSSE 2005, November 17-18, 2005

Grants

• "Ultrasound Practice System for Fetal Echocardiography" granted by Rachavithee Hospital Innovation Fund, since April 2011 – March 2012.

• "Gait and Motion Analysis of Elderly People Project" supported by the Higher Education Research Promotion and National Research University Project of Thailand, Office of the Higher Education Commission (id AS585A), since October 2010 – September 2011.

• "Digital Achieve System for Khon-Thai Classical Play", sponsored by NSTDA research fund, since August, 2009 – March, 2011.

• "TRF Master Research Grants : (TRF-MAG)" granted by the Thailand Research Fund, a state research funding agency , since June, 2010 – May, 2012.

• "Thailand Graduate Institute of Science and Technology (TGIST) Scholarship for Master Thesis Advisor" by NSTDA research fund, since June, 2010 – May, 2012.

• "The Royal Golden Jubilee Grant for PhD Advisor (Industrial Track)", granted by the Thailand Research Fund, a state research funding agency, in co-operation with the Ministry of University Affairs (now the Office of the Higher Education Commission) and the National Science and Technology Development Agency, since April 2009 – March 2011.

• "Campus Connect Program between Thai Universities and Infosys India", under initiative of Her Royal Highness Princess Maha Chakri Sirindhorn, sponsored by NECTEC and INFOSYS, at Mysore, India, since March 22nd - April 6th 2008.

• "Development of Computer Aided Garment Design Software for Khon-Thai Classical Play", Jointed project with The Fine Arts department of Thailand inspired by Her Royal Highness Princess Maha Chakri Sirindhorn, sponsored by Faculty of Engineering's research fund, Chulalongkorn University, since November 4th, 2007 – October 30 th, 2008.

• "The Royal Golden Jubilee Grant for Ph.d Advisor ", granted by the Thailand Research Fund, a state research funding agency, in co-operation with the Ministry of University Affairs (now the Office of the Higher Education Commission) and the National Science and Technology Development Agency, since April 2007 – March 2010.

• "A Study of 3D Cloth Modeling for Garment Design and Manufacturing", Thai Industrial Standards Institute (TISI), Ministry of Industry, April 1st, 2005 - March 31st, 2006.

• "Enhancement of Mesh Simplification Method for 3D Model Presentation on Mobile Phone", National Science and Technology Development Agency (NSTDA), Ministry of Science and Technology, September 1st, 2005 - August 30th, 2006.

• "Using Cellular Structured Space for Modeling 3D Object", Chulalongkorn University, September 28th, 2005 to September 27th, 2006.

Honors and Awards

- Team Advisor for awarded best innovation project of IEEE Senior Project Contest (2006-2011)
- ACM-ICPC Coach of Chulalongkorn University awarded Thailand Champion Team (2010)
- IEEExtreme4.0 Coach of Chulalongkorn University awarded 7th and 24th rank of the world (2010)
- ACM-ICPC Coach of Chulalongkorn University awarded Thailand Champion Team (2009)
- IEEExtreme3.0 Coach of Chulalongkorn University awarded 3rd rank of the world (2009)
- Team Advisor for awarded Projects of Nation Software Contest (2006-2011)
- Interviewed on "Digital Khon" for Several TV program (Morning Talk, Channel 9 TV, ASTV, 2009.
- Interviewed on "Digital Archival for Khon" for Dailynews Newspaper, September, 2009.
- Interviewed on "Khon in Digital Era" for Manager Online, September, 2009.
- Interviewed on "Bangkok Fashion Industry: Digital Technology in Garment Design" for CIO Forum magazine, October, 2004.
- Awarded Thai Royal Government Scholarship from 1995 to 2002

Publication Lists

International Journal

- Saithip Limtrakul, Wisut Hantanong, Pizzanu Kanongchaiyos and Tomoyuki Nishita, "Reviews on Physically based Controllable Fluid Animation". *Engineering Journal*, vol.14, no. 2, pp. 41-52, April 2010, doi:10.4186/ej.2010.14.2.41
- Songpol Attasiriluk, Wisut Hantanong, Arturo Nakasone, Rui Prada, Pizzanu Kanongchaiyos and Helmut Prendinger, "Co-presence, Collaboration, and Control in Environmental Studies". *Virtual Reality*, Journal no. 10055, Springer London [Online]. Available: http://dx.doi.org/10.1007/s10055-009-0130-5
- Satakhun Kosavinta, Pizzanu Kanongchaiyos and Pinyo Jinuntuya, "Integration of CAD Software with DSS for Engineering and Architectural Project Design". *Computer-Aided Design and Applications Journal*, 2007, Vol. 4, Nos. 1-4, 2007, ISSN 1686-4360, pages 467-477
- Nida Saenghaengtham and Pizzanu Kanongchaiyos, "Using LBG Quantization for Particle-based Collision Detection Algorithm". *Journal of Zhejiang University - Science A (JZUS)*, EEE & Information Science, Zhejiang University Press, co-published with Springer-Verlag GmbH, ISSN 1673-565X (Print) 1862-1775 (Online), Volume 7, Number 7 / July, 2006, pages 1225-1232
- Varakorn Ungvichian and Pizzanu Kanongchaiyos, "Mapping A 3-D Model into Abstract Cellular Complex Format". Computer-Aided Design and Applications Journal, Vol. 3, Nos. 1-4, 2006, ISSN 1686-4360, pages 395-404
- Pizzanu Kanongchaiyos and Tomoyuki Nishita, "A Study of 3D Animation Using Reeb Graphs". Joho Shori Gakkai Kenkyu Hokoku Journal, Information Processing Society of Japan (IPSJ) SIG Notes, Vol.2002, No.77 (20020808), pages 25-30, ISSN:09196072

National Journal

- 1. Saran Sillapaphiromsuk and Pizzanu Kanongchaiyos, "Crowd Animation Using Reeb Graph" (in Thai). *Engineering Journal*, Vol. 3, No. 2, 2011, pages 17-32, doi:10.4186/ejth.2011.3.2.17
- 2. Songpol Attasiriluk and Pizzanu Kanongchaiyos, " 3D Polygonal Mesh to Primitive Conversion Using Reeb Graph" (in Thai). *Engineering Journal,* Vol. 3, No. 2, 2011, pages 43-52. doi:10.4186/ejth.2011.3.2.43
- 3. Thavesak Chuensaichol, Pizzanu Kanongchaiyos and Chai Wutiwiwatchai, "Thai Lip-sync: Mapping Lip Movement to Thai Speech" (in Thai). *Engineering Journal*, Vol. 3, No. 2, 2011, pages 33-42. doi:10.4186/ejth.2011.3.2.43
- 4. Utsanee Naowanat, Nalinrat Meteesahakarn, Nakornthip Prompoon, Pizzanu Kanongchaiyos and Setha Panngum, "Design and Development of An Archive Retrieval Prototype System for Khon Information" (in Thai), Engineering Journal, Vol. 2, No. 2, 2010, pages 25-48, doi:10.4186/ejth.2010.2.2.25
- 5. Siam Thanaporn, Pizzanu Kanongchaiyos and Chatpong Tangmanee, "Using Motion Capture for Analysis Struggle of Judo" (in Thai), *Engineering Journal*, Vol. 2, No. 2, 2010, pages 49-68, doi:10.4186/ejth.2010.2.2.49

International Conference Proceedings

- 1. Varakorn Ungvichian and Pizzanu Kanongchaiyos, "A Mesh Reduction Method Based on Principal Curvatures and Directions", in Proceedings of Computer Graphics International (CGI), Ottawa, Canada, June 12-15, 2011
- Pimrapat Thanusutiyabhorn, Pizzanu Kanongchaiyos and Waleed S. Mohammed, "Image-based 3D Laser Scanner", in Proceedings of 8th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2011), Khon Kaen, Thailand, May 17-19, 2011
- 3. Auttwut Laichuthai and Pizzanu Kanongchaiyos, "Synchronization between Motion and Music Using Motion Graph", in Proceedings of 8th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2011), Khon Kaen, Thailand, May 17-19, 2011
- Theeraphat Satjawiso and Pizzanu Kanongchaiyos, "3D Hand Pose Modeling from Uncalibrate Monocular Images", in Proceedings of 8th Joint Conference on Computer Science and Computer Engineering (JCSSE 2011), Nakorn Pathom, Thailand, May 11-13, 2011
- 5. Art Subpa-asa and Pizzanu Kanongchaiyos, "Global Object Placement Relation for Improving 3-D Scene Construction from Single Image", in Proceedings of 8th International Conference on Electrical

Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON 2011), Khon Kaen, Thailand, May 17-19, 20111906-3636, doi:10.4186/ejth.2010.2.2.25

- Pilunchana Kiatruangkrai, Poomipat Phusayangkul, Supanut Viniyakul, Nakornthip Prompoon, and Pizzanu Kanongchaiyos, Design and Development of Real-Time Communication Content Management System for E-Commerce in Proceedings of 2nd International Symposium on Data, Buffalo/Niagara Falls, USA., & E-Commerce (ISDPE 2010), August 13-14, 2010
- Kosit Nopvichai and Pizzanu Kanongchaiyos, 3D Hand Motion Retargeting From Video Image Sequence in Proceedings of 2nd International Conference on Computer and Automation Engineering (ICCAE 2010), Singapore, February 26 - 28, 2010
- Saithip Limtrakul and Pizzanu Kanongchaiyos, Preserving Details in 3D Fluid Animation by Using Adaptive Kernel Estimation in Proceedings of 3rd IEEE International Conference on Computer Science and Information Technology (IEEE ICCSIT 2010), July 9 - 11, 2010, Chengdu, ChinaVarakorn Ungvichian and Pizzanu Kanongchaiyos, "Quadrangle Collapse Mesh Simplification with Regularity and Angular Deviation Bias and Probabilistic Heap Updating". in Proceedings of the 2nd International Conference on Computer Modeling and Simulation (ICCMS 2010), Vol.2, Sanya, China, January 22 - 24, 2010, pages 32-37
- Thiti Rungcharoenpaisal and Pizzanu Kanongchaiyos, "Collision Detection for High Resolution Deformable Object Using Particle-based Approach". In ACM SIGGRAPH ASIA 2009: Posters, Yokohama, Japan, December 17-19, 2009.
- 10. Art Subpa-asa, Natchapon Futragoon and Pizzanu Kanongchaiyos, "Adaptive 3-D Scene Construction from Single Image Using Extended Object Placement Relation". in Proceedings of the 8th ACM SIGGRAPH international Conference on Virtual-Reality Continuum and Its Applications in industry, Japan, December 14 - 15, 2009
- 11. Nattawee Kowsuwan and Pizzanu Kanongchaiyos, "3D Cloud animation using CA based method". In Proceedings of 2009 International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2009), Kanazawa Excel Hotel Tokyu, Kanazawa, Japan, December 7-9, 2009
- Natchapon Futragoon and Pizzanu Kanongchaiyos, "3-D Scene Approximation Using Object Placement Relation". In Proceedings of 4th Ibreoamericano Symposium in Computer Graphics, Margarita Island, Venezuela, June 15-17, 2009
- Nattawee Kowsuwan and Pizzanu Kanongchaiyos, "The generating of 3D Cloud from satellite image by using Cellular Automata". The 6th International Joint Conference on Computer Science and Software Engineering (JCSSE2009), Puket, Thailand, May 13-15, 2009, pages 82-85
- Sorasak Chailerd and Pizzanu Kanongchaiyos, "Computer Simulation of Aircraft Landing with Collision Avoidance". The 6th International Joint Conference on Computer Science and Software Engineering (JCSSE2009), Phuket, Thailand, May 13-15, 2009, pages 58-71
- 15. Thiti Rungcharoenpaisal and Pizzanu Kanongchaiyos, "Using Adaptive Particle Senor and GPU for a Collision Detection in High Resolution Polygonal Objects". The 6th International Joint Conference on Computer Science and Software Engineering (JCSSE2009), Phuket, Thailand, May 13-15, 2009, pages 9-14
- 16. Natchapon Futragoon and Pizzanu Kanongchaiyos, "Enhanced Depth Estimation by Using Object Placement Relation". In Proceedings of 2008 IEEE International Conference on Robotics and Biomimetics (ROBIO2008), Imperial Queen's Park Hotel Bangkok, Thailand, February 21-26, 2009
- Thammapong Dharamadhat and Pizzanu Kanongchaiyos, "Object Tracking in Video Sequences based on Background Subtraction and Multiresolution Critical Point Filters". In Proceedings of 2008 IEEE International Conference on Robotics and Biomimetics (ROBIO2008), Imperial Queen's Park Hotel Bangkok, Thailand, February 21-26, 2009
- Thiti Rungcharoenpaisal and Pizzanu Kanongchaiyos, "A Collision Detection Algorithm Using Adaptive Particle Sensor". In Proceedings of 2008 IEEE International Conference on Robotics and Biomimetics (ROBIO2008), Imperial Queen's Park Hotel Bangkok, Thailand, February 21-26, 2009
- Jakrapong Narkdej and Pizzanu Kanongchaiyos, "An Efficient Parameters Estimation Method for Automatic Patch-based Texture Synthesis". in Proceedings of 6th International conference on Computer Graphics, Virtual Reality, Visualisation and Interaction in Africa (AFRIGRAPH2009), Centurion Lake Hotel, Pretoria, South Africa. February 4th - 6th, 2009.
- 20. Jakrapong Narkdej and Pizzanu Kanongchaiyos, "Fast and robust parameter estimation method for patch-based texture synthesis". In Proceedings of the 7th ACM SIGGRAPH international Conference on Virtual-Reality

Continuum and Its Applications in industry (Singapore, December 08 - 09, 2008). VRCAI '08. ACM, New York, NY, 1-2. DOI= http://doi.acm.org/10.1145/1477862.1477909

- 21. Pornpis Kaewlai, Pinyo Jinuntuya and Pizzanu Kanongchaiyos, "Interactive Feasibility-based CAAD System for Infrastructure and Open Space Planning in Housing Project Design". In Proceedings of 12nd Computer Aided Architectural Design and Research in Asia (CAADRIA), Chiang Mai, Thailand, April 9-12, 2008
- 22. Wiboonsiri Wiboonma, Pinyo Jinuntuya and Pizzanu Kanongchaiyos, "Multi-Directional Interrelationship Approach for Hybrid Interactive Design Tool for High-Rise Building". In Proceedings of 12nd Computer Aided Architectural Design and Research in Asia (CAADRIA), Chiang Mai, Thailand, April 9-12, 2008
- 23. Kittisak Arpornwicharnop, Pinyo Jinuntuya and Pizzanu Kanongchaiyos, "Simulation Software Development for Urban Landscape Possibility Analysis". In Proceedings of 12th Computer Aided Architectural Design in Asia (CAADRIA) 2007 Conference, Southeast University, Nanjing University, China, 19-22 April, 2007. (To appear)
- 24. Arisara Sumleeon and Pizzanu Kanongchaiyos, "Keyframe Control of Fluid Simulation using Skeletal Particles". In Proceedings of The International Conference on Computational Methods 2007 (ICCM2007), International Conference Center Hiroshima, Japan, April 4-6 2007.
- 25. Pizzanu Kanongchaiyos, "Calculation of Document Similarity Using Cellular Structured Space Template". In Proceedings of IASTED International Conference on Advances in Computer Science and Technology (ACST 2007), Phuket, Thailand, April 2-4, 2007, pages 311-316.
- 26. Satakhun Kosavinta, Pinyo Jinuntuya and Pizzanu Kanongchaiyos, "Automation in Feasibility Analysis of Housing Project for Collaborative 3D e-Learning and Decision Support System ". in Proceedings of International Conference and Workshop on e-Learning Strategies: Edutainment for Future Education, Suan Dusit Rajabhat University, Bangkok, Thailand, March 12-17, 2007
- 27. Kittipong Thanasoontornlerk and Pizzanu Kanongchaiyos, " An Image Matching Using Critical-Point Filter and Level Set Analysis". In Proceedings of 15th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision'2007, University of West Bohemia, Campus-Bory Plzen, Plezn, Czech Republic, January 29 - February 1, 2007.
- 28. Siriprapa Pakdee and Pizzanu Kanongchaiyos, "Cartoon Retrieval Using LBG-Algorithm Based State Vector Quantization". In Proceedings of 15th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision'2007, University of West Bohemia, Campus-Bory Plzen, Plezn, Czech Republic, January 29 - February 1, 2007.
- 29. Varakorn Ungvichian and Pizzanu Kanongchaiyos, "Finding Thin Points in an Abstract Cellular Complex". In Proceedings of 15th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision'2007, University of West Bohemia, Campus-Bory Plzen, Plezn, Czech Republic, January 29 -February 1, 2007.
- 30. Varakorn Ungvichian and Pizzanu Kanongchaiyos, "3-D Object Extraction Using Volume Computation". In Proceedings of 15th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision'2007, University of West Bohemia, Campus-Bory Plzen, Plezn, Czech Republic, January 29 -February 1, 2007.
- 31. Weerawat Tantisiriwat, Alisara Samleeoon and Pizzanu Kanongchaiyos, " A Crowd Simulation Using Individual-Knowledge-Merge based Path Construction and Smoothed Particle Hydrodynamic". In Proceedings of 15th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision'2007, University of West Bohemia, Campus-Bory Plzen, Plezn, Czech Republic, January 29 - February 1, 2007.
- 32. Akadej Udomchaiporn, Nakornthip Prompoon, and Pizzanu Kanongchaiyos, "Software Requirements Retrieval Using Use Case Terms and Structure Similarity Computation". In Proceedings of 13th Asia Pacific Software Engineering Conference (APSEC06), Bangalore, India, December 6-8, 2006. pages 113 - 120
- Rungwit Laichuthai and Pizzanu Kanongchaiyos, "An Enhancement of Reeb Graph for Modeling Hydrogeological Information". In the 2006 International Conference on Cyberworlds, EPFL, Lausanne, Switzerland, November 28-29, 2006. pages 93-96
- 34. Kittipong Thanasoontornlerk and Pizzanu Kanongchaiyos, "Mapping Multi-level Image Using Level Set Analysis". Poster session presented at the 1st Thai-Japanese Student Exchange Meeting, Osaka University, Osaka, Japan, November 2-3, 2006.

- 35. Rungwit Laichuthai and Pizzanu Kanongchaiyos, "An Algorithm for Multi-layer Three Dimensional Object Modeling". Poster session presented at the 1st Thai-Japanese Student Exchange Meeting, Osaka University, Osaka, Japan, November 2-3, 2006.
- 36. Nida Saenghaengtham and Pizzanu Kanongchaiyos, "LBG Quantization-based Collision Detection Algorithm". Poster session presented at the 24th Computer Graphics International Conference (CGI'2006), Zhejieng University, Hangzhou, P.R. China, June 26-28, 2006.
- 37. Nida Saenghangtham and Pizzanu Kanongchaiyos, "A Collision Detection Algorithm using Particle Sensor". In Proceedings of 2006 IEEE International Conferences on Cybernetics & Intelligent Systems (CIS) and Robotics, Automation & Mechatronics (RAM) (CIS-RAM 2006), 7 - 9 June 2006 in Bangkok, Thailand, pages
- Hassanan Chanyawudhiwan and Pizzanu Kanongchaiyos, "Image Retrival using Level of Color Space". In Proceedings of 3rd Annual International Conference of Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology (ECTI-CON), Ubon Rachathani, Thailand, May 10-13, 2006, pages.
- 39. Nattachai Tipprasert and Pizzanu Kanongchaiyos, " An Interactive Rendering Method for Water-Side Scene with Caustics using Color and Depth Textures". In Procceedings of 1st International Conference on Computer Graphics Theory and Applications (GRAPP2006), Setubal, Portugal, Feburary 25-28, 2006, pages 423-428
- Pongvarin Vijitvechpaisarn and Pizzanu Kanongchaiyos, "Enchanced Billboard for Model Simplification". In Proceedings of 14th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG2006), University of West Bohemia, Plzen, Czech Republic, January 31 – February 2, 2006, pages 125-131.
- 41. Nattachai Tipprasert and Pizzanu Kanongchaiyos, "An Interactive Method for Refractive Water Caustics Rendering Using Color and Depth Textures". Paper presented at the 2nd International forum on Animation and Multimedia in TAM2006, Ministry of Information Communication and Telecommunication, Thailand, Jan 12-15, 2006.
- 42. Nida Saenghangtham and Pizzanu Kanongchaiyos, "A Collision Detection Algorithm for Deformable Objects using Particle-Based Method". Paper presented at the 2nd International Conference on Animation and Multimedia in TAM2006, Ministry of Information Communication and Telecomunication, Thailand, Jan 12-15, 2006
- 43. Napaporn Metaaphanon and Pizzanu Kanongchaiyos, "Real-time Cloth Simulation for Garment CAD". In Proceedings of 3rd International Conference on Computer Graphics and Interactive Techniques in Australasia and Southeast Asia, Dunedin, New Zealand, November29 - December 2nd, 2005, pages 83-89.
- Nat Charussuriyong and Pizzanu Kanongchaiyos, "3D Object Modeling Method for Multimedia Using Cellular Structured Space". In Proceedings of 6th International Conference on Computational Intelligence and Multimedia Applications (ICCIMA 2005), Las Vegas, NV, USA, August 16-18, 2005, ISBN 0-7695-2358-7, Volume 00, Pages 247-252.
- 45. Saran Dumrongkittikul, Thongeak Tirasirachai, Arjin Jongjarernmongkol and Pizzanu Kanongchaiyos, " 3D Object Reconstrction System Using Cross-sectional Data". Paper presented at the 1st International forum on Animation and Multimedia in TAM2005, Ministry of Information Communication and Telecommunication, Thailand, May, 24-25, 2005.
- 46. Pizzanu Kanongchaiyos, "Topology-Oriented Free-Form Deformations with Object-Shaped Lattices". In Proceedings of 7th International Computer-Aided-Design and Computer Graphics Conference (CAD/Graphics), Macao, China, October 29-31, 2003, pages 271-276.
- 47. Pizzanu Kanongchaiyos, Tomoyuki Nishita, Yoshihisa Shinagawa and Tosiyasu Laurence Kunii, "Topological Morphing Using Reeb Graphs". In Proceedings of 1st International Symposium on Cyber Worlds: Theories and Practices (CW2002), Tokyo, Japan, November 6-8, pages 465-471.
- 48. Pizzanu Kanongchaiyos and Yoshihisa Shinagawa, "Articulated Reeb Graphs for Interactive Skeleton Animation". In Proceedings of 1st Multimedia Modeling: Modeling Multimedia Information and System (MMM2000), Nagano Convention Bureau, Nagano, Japan, November 13-15, 2000, World Scientific, ISBN: 9810244894, pages 451-467.

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