

Tentative 2006 Annual Report (May 2005 – April 2006)
Multimedia Systems and Applications Technical Committee
IEEE Circuits and Systems Society

Chairman: Prof. Oscar C. Au
Secretary: Prof. Kar-Ferr Kevin Yang

1. Two TC meetings were held in the past year.

- 1.1 The TC Annual Meeting was held on May 25, 2005 at Kobe, Japan during the 2005 IEEE International Symposium on Circuits and Systems (ISCAS 2005).
- 1.2 The last TC meeting was held on July 6, 2005 at Amsterdam, the Netherland during the IEEE 2005 International Conference on Multimedia and Expo (ICME 2005).

2. Activities in conferences/workshops (May'05 –April'06):

2.1. Multimedia Track of ISCAS 2005, Kobe, Japan, 23-26 May, 2005.

Participations of TC members include:

- MSA Track Chair: Wai-Chi Fang, Oscar C. Au
- Nano-Giga Technology Track Chair: Chin-Teng Lin
- Technical Program Committee Members: Yu Hen Hu, Wai-Chi Fang, Oscar C. Au, Bin-Da Liu, Jacky Guobin Shen
- Session Chairs/Co-Chairs: Bin-Da Liu, Wai-Chi Fang, Oscar C Au,
- Special session: "Multimedia Watermarking and Data Hiding" organized by Yun Q. Shi, Alex Kot, Jiwu Huang.

2.2. ICME 2005, July 6, 2005, Amsterdam, the Netherland.

Many MSA TC members participated in the ICME 2005:

- TPC member: Alexander Loui, Jacky Guobin Shen
- Session Chairs/Co-Chairs: Alexander Loui

2.3. First International Workshop on Intelligent Information Hiding and Multimedia Signal Processing (IIH-MSP-05), Nov. 10-11, 2005, Melbourne, Australia (This workshop is initiated by ourMSA TC and co-sponsored by IEEE CAS Society)

- General Co-Chairs: Jeng-Shyang Pan, Wai-Chi Fang;
- Publication Chair: Hsiang-Cheh Huang,
- North America Liaison: Yun Q. Shi;
- TPC member: Oscar Au, Chang Wen Chen, Liang Gee. Chen, Tsuhan. Chen , C.S. Li, C.T. Lin, C.Y. Lin, E. Magli, M.R. Naphade, H. Wang
- Plenary Talk: Wai-Chi Fang, on "Embedded Information Processing and Wireless Communication Systems-on-Chip for Intelligent Sensor Networks,"
- Plenary Talk: Oscar Au, on "Multimedia Compression"

2.4. The 9th International Workshop on Cellular Neural Networks and Its Applications, May 28-30, 2005, Hsinchu, Taiwan

- Meeting Chair: Bin-Da Liu
- Technical Program Co-Chair: Jar-Ferr (Kevin)Yang, and Chin-Teng Lin

2.5. 2005 IEEE International Workshop on VLSI Design and Video Technology, May 28-31, 2005, Suzhou, China

- Technical Program Co-Chair: Bin-Da Liu

2.6. 2005 International Workshop on Digital Watermarking (IWDW 2005)

- Publications Chair: Enrico Magli
- TPC member: Min Wu

- 2.7. 71st ISO/IEC MPEG Standard Meeting, Jan 2005, Hong Kong.**
- Program Chair: Oscar C. Au
- 2.8. Workshop on MPEG Technologies and Standards, Jan 2005, Hong Kong.**
- Chairman: Oscar C. Au
- 2.9. IEEE Workshop on Multimedia Signal Processing (MMSP05), Oct. 2005.**
- Technical Co-Chair: Yun-Qing Shi
- 2.10. IEEE Int. Conf. on Acoustics, Speech and Signal Processing (ICASSP), May 2005.**
- Technical Program Co-Chair: Min Wu
 - TPC member: Jacky Guobin Shen
- 2.11. IEEE Int. Conf. on Image Processing (ICIP, Oct 2005, SP Society)**
- TPC member: Min Wu, Alexander Loui, Jacky Guobin Shen
- 2.12. SPIE Conference on Security, Watermarking and Steganography (Jan 2006):**
- TPC member: Min Wu
- 2.13. Second Int. Meeting on Microsensors and Microsystems, Jan 16-18, 2006, Tainan, Taiwan**
- Technical Program Co-Chair: Bin-Da Liu
- 2.14. Image and Video Retrieval, 2006**
- Program Co-Chair: Milind Naphade
- 2.15. ARDA Challenge Workshop Series on Large Scale Concept Ontology for Multimedia Understanding:**
- Milind Naphade is leading this workshop
- 2.16. IEE Mobility Conference, Sept. 2005, Guangzhou, China**
- Plenary speaker: Oscar C. Au
- 2.17. 2006 IEEE Int. Conf. on Networking, Sensing and Control, Apr. 23-25, 2006, Ft. Lauderdale, Florida, USA**
- TPC member: Bin-Da Liu
- 2.18. VLSI-TSA DAT, Apr. 26-28, 2006, Hsinchu, Taiwan.**
- TPC member: Bin-Da Liu
- 2.19. IEEE Systems on Chip Conference, Sept. 2005, Austin, TX, USA.**
- TPC member: Ramalingam Sridhar
 - Steering Committee member: Ramalingam Sridhar
- 2.20. Conference on Broadnets Wireless 2006, San Jose, CA, USA.**
- TPC member: Ramalingam Sridhar
- 2.21. Seventh ACM Int. Sym. On Mobile Ad Hoc Networking and Computing (MobiHoc), 2006, Florence, Italy.**
- PTC member: Ramalingam Sridhar
- 2.22. IEEE Int. Sym. On a World of Wireless, Mobile and Multimedia Networks (WowMoM), 2006, Buffalo, NY, USA.**
- TPC member: Ramalingam Sridhar
- 2.23. IEEE Int. Workshop on Next Generation Wireless Networks (WonGen), 2005, Goa, India.**

- TPC member: Ramalingam Sridhar
- 2.24. 15th Annual IEEE Int. System on Chip (SOC) Conf, Sept. 2005, Washington, D.C., USA.**
- Steering Committee and TPC member: Ramalingam Sridhar
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- 2.25. IEEE Workshop on Genomic Signal Processing and Statistics, May 22-24, 2005, Newport, Rhode Island, USA.**
- TPC Co-Chair: Jie Chen.
- 2.26. Workshop on Advances in Peer-to-Peer Multimedia Streaming in ACM Multimedia 2005**
- Co-Chair: Qian Zhang
 - TPC member: Jacky Guobin Shen
 - Session Chair: Guobin Shen
- 2.27. ICCCAS, 2005.**
- TPC member: Jacky Guobin Shen
- 2.28. International Workshop on Multimedia Systems and Networking (WMSN'05)**
- Program Co-Chair: Qian Zhang
- 2.29. ICONIP, APPNA, Oct 2005, Taipei, Taiwan.**
- General Chair: Chin-Teng Lin
- 2.30. Picture Coding Symposium**
- General Co-Chair: Joern Ostermann
- 2.31.. International Workshop on Digital Watermarking, Nov. 2006, Korea.**
- Technical Co-Chair: Yun-Qing Shi
- 2.32. Audio Video Coding workgroup, China**
- Convenor: Gao Wen
 - Contributor: Gao Wen, Yiqiang Chen, Oscar C. Au
- 2.33. 6th Int. Caribbean Conf. on Devices, Circuits and Systems, Apr. 2006, Cozumel, Mexico.**
- Plenary Speaker: Bing Sheu (on “High-Tech Engineering Success in 21st Century”)
- 2.34. Sun Yat-sen University, Guangzhou, China.**
- Distinguished lecturer: Alex Kot
- 2.35. VLSI Design and CAD Conference, Aug. 2005, Hua-Lien City, Taiwan.**
- Panel member: Bing Sheu (on “Competition and Sustainable Strength of High-Tech Companies in US and Worldwide”)
- 2.36. MediaTek Workshop, Jan 2006, Hsin-Chu City, Taiwan.**
- Invited speaker: Bing Sheu (on “21st Century Success Philosophy, Search and Research”)
- 2.37. IEEE Int. Conf. on Acoustics, Speech and Signal Processing, May 2006, Toulouse, France.**
- Tutorial speaker: Yun-Qing Shi (on “Steganography and Steganalysis”)
- 2.38. IEEE Int. Sym. On Intelligent Signal Processing and Communications Systems, 2005, Hong Kong.**
- Keynote speaker: Jar-Ferr Kevin Yang
- 2.39. Int. Sym. On Communications, 2005, Kaohsiung, Taiwan.**
- Keynote speaker: Jar-Ferr Kevin Yang.

2.40. IEEE Int. Sym. On VLSI Technology and International Symposium on VLSI Design, Automation and Test, 2005, Tsinchu, Taiwan.

- Tutorial speaker: Jar-Ferr Kevin Yang.

2.41. Seminar at IEEE North Jersey Section and IEEE NJ Ocean Section

- Speaker: Yun-Qing Shi (on “Steganography and Steganalysis”)

2.42. SPIE Conf. on Visual Communication and Image Processing (VCIP), July 2004, Beijing, China.

- Keynote speaker: Ming-Ting Sun (on “Mobile Computing”)

2.43. Conf. on Computer Vision, Graphics and Image Processing, Aug. 2005, Taipei, Taiwan.

- Keynote speaker: Ming-Ting Sun (on “Graph Modeling for finding similar images and right experts”)

3. Activities in on-going or future conferences/workshops (May’05 – future)

3.1. Multimedia Track of ISCAS 2006, Island of Kos, Greece, 21-24 May, 2006.

- Multimedia Systems and Applications Track Chair: Oscar Au
- Nanoelectronics and Gigascale Systems Track Chair: Wai-Chi Fang
- TPC member: Wai-Chi Fang, Yu Hen Hu, Oscar Au, Enrico Magli and many others
- Special session Co-Chair: Chin-Teng Lin
- Session Chairman: Bin-Da Liu, Alexander Loui, and many others

3.2. ICME 2006, Toronto, Canada, 9-12 July 2006:

- Track: Multimedia Hardware, Architecture, and Systems
- Track and TPC Chair: Chang Wen Chen
- TPC member: Jacky Guobin Shen, Enrico Magli, Oscar Au

3.3. ICME 2007

- Program Co-Chair: Joern Ostermann

3.4. IEEE International Conf. on Communication (ICC), 2006.

- TPC member: Enrico Magli

3.5. MWSCAS, Aug. 6-9, 2006, San Juan, Puerto Rico.

- RCM member: Bin-Da Liu

3.6. IEEE SMC, Oct. 8-11, 2006, Taipei, Taiwan

- Program Chair: Chin-Teng Lin.
- TPC member: Bin-Da Liu

3.7. IEEE Region 10 Conference (TENCON), Nov. 14-17, 2006, Hong Kong

- TPC member: Bin-Da Liu, Oscar Au

3.8. WICON, 2006.

- TPC member: Jacky Guobin Shen

3.9. CHINACOM, 2006

- TPC member: Jacky Guobin Shen

3.10. ISM, 2006

- TPC member: Jacky Guobin Shen

3.11. IEEE Int. Sym. On Multimedia (ISM), Dec 11-13, 2006, San Diego, CA, USA.

- TPC Co-Chair and Special Track Co-Chair: Qian Zhang

3.12. IEEE Consumer Communications and Networking Conference (CCNC), 2007.

- Special Session Co-Chair: Qian Zhang

3.13. IEEE/NIH Workshop on Life Science Systems and Applications, July 13-14, 2006, Bethesda, Maryland.

- TPC Co-Chair: Jie Chen, Wai-Chi Fang

3.14. International Conference on Innovative Computing, Control and Information Processing, Aug.. 10-11, 2006, Beijing, China.

- General Co-Chair: Wai-Chi Fang

3.15. International Workshop on Intelligent Information Hiding and Multimedia Signal Processing, Pasadena Convention Center, Dec. 10-11, 2006, Pasadena, CA, USA.

- General Chair: Wai-Chi Fang.

3.16. IEEE Int. Conf. on Acoustics, Speech and Signal Processing (ICASSP), May 2006, Toulouse, France.

- TPC member: Enrico Magli

3.17. International Workshop on Multimedia Systems and Networking (WMSN'06)

- Program Co-Chair: Qian Zhang

3.18. WCNC 2007

- TPC member: Jacky Guobin Shen

3.19. IEEE Int. Conf. on Image Processing (ICIP), Oct. 2006, Atlanta, GA, USA.

- TPC member: Enrico Magli

3.20. IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)

- TPC member: Oscar Au

3.21. IEEE Pacific-Rim Symposium on Image and Video Technology, (PSIVT'06).

- General Chair: Wen-Nung Lie
- TPC member: Oscar Au

3.22. SPIE Conf. on Security, Steganography and Watermarking of Multimedia Contents, Jan 2007, San Jose, CA, USA.

- TPC member: Oscar Au

3.23. 2006 International Conference on Innovative Computing, Information and Control (ICICIC-06).

- TPC member: Oscar Au

4. Activities in Editorial Services:

4.1. IEEE Tran. On Multimedia

AE: Pascal Frossard, Qian Zhang, Alexander Loui, Ching-Yung Lin
Reviewer: Jacky Guobin Shen

4.2. IEEE Circuits and Devices Magazine

AE: Bin-Da Liu, Jar-Ferr Kevin Yang,

4.3. IEEE Trans. On Circuits and Systems for Video Technology:

EIC: Chang Wen Chen
AE: Oscar C. Au, Pascal Frossard,
Reviewer: Jar-Ferr Kevin Yang, Oscar C. Au, Jiwu Huang, Jacky Guobin Shen, Enrico Magli

4.4. IEEE Transactions on Circuits and Systems-I

Deputy EIC: Chin-Teng Lin (2006-2007)
AE: Bin-Da Liu
Reviewer: Jar-Ferr Kevin Yang

4.5. IEEE Transactions on Circuits and Systems-II:

Reviewer: Jar-Ferr Kevin Yang, Jiwu Huang, Alexander Loui (2004-2006)

4.6. IEEE Trans. On Image Processing

Reviewer: Jacky Guobin Shen, Oscar C. Au, Enrico Magli

4.7. Proceedings of IEEE

AE: Bing Sheu

4.8. IEEE Interactive Magazine, Communication Society

Editor: Ching-Yung Lin

4.9. IEEE Transactions on Very Large Scale Integration (VLSI) Systems:

AE: Bin-Da Liu,

4.10. EURASIP Journal of Applied Signal Processing:

AE: Jar-Ferr Kevin Yang,
Reviewer: Jar-Ferr Kevin Yang

4.11. IEEE Trans. On Signal Processing

Reviewer: Jar-Ferr Kevin Yang

4.12. IEEE Trans. On Neural Network

Reviewer: Jar-Ferr Kevin Yang

4.13. IEEE Signal Processing Letters

Reviewer: Jar-Ferr Kevin Yang, Jiwu Huang

4.14. IEEE Wireless Communications Magazine

Reviewer: Jacky Guobin Shen,

4.15. Real-Time Imaging

Reviewer: Jacky Guobin Shen,

4.16. Journal of Computer (In Chinese)

Reviewer: Jacky Guobin Shen

4.17. Journal of Visual Communication and Image Representation

Editorial Board: Ching-Yung Lin
Reviewer: Jacky Guobin Shen

4.18. Multidimensional Systems and Signal Processing, Springer

AE: Yun-Qing Shi

4.19. International Journal of Image and Graphics

Editorial Board member: Yun-Qing Shi

4.20. IEE Proc. On Vision, Image and Signal Processing

Reviewer: Jar-Ferr Kevin Yang

4.21. Signal Processing

Reviewer: Jar-Ferr Kevin Yang

4.22. Journal of the Chinese Institute of Engineers

Reviewer: Jar-Ferr Kevin Yang

4.23. Journal of the Chinese Institute of Electrical Engineering

Reviewer: Jar-Ferr Kevin Yang

4.24. EURASIP Journal on Applied Signal Processing, Special Issue on “Advanced Video Technologies and Applications for H.264/AVC and Beyond”, 2006.

Guest editor: Jar-Ferr Kevin Yang

4.25. EURASIP Journal on Applied Signal Processing, Special Issue on “Video analysis and coding for Robust Transmission”.

Guest Editor: AdrianaDumitras

4.26. EURASIP Journal on Applied Signal Processing, Special Issue on “Visual Sensor Network”

Guest Editor: Ching-Yung Lin

4.27. IEEE Signal Processing Magazine “Life Science Column”

Guest Editor: Jie Chen.

4.28. IEEE Journal on Selected Areas in Communications (JSAC), Special Issue on “Cross Layer Optimized Wilress Multimedia Communication”, 2006.

Guest Editor: Qian Zhang

4.29. IEEE Wireless Communication Magazine, Special Issue on “Wireless Multimedia/Video”, 2005.

Guest Editor: Qian Zhang

4.30. NCTU Press “Views on Modern Education in 21st Century”, Apr. 2006.

Co-Editor: Bing Sheu

4.31. IEEE Systems Journal

Member of Advisory Board: Wai-Chi Fang

4.32. Intelligent Multimedia Hiding and Processing, Feb. 2006, Springer-Verlag.

Co-Editor: Wai-Chi Fang

5. IEEE CAS Distinguished Lecturer:

- Jar-Ferr KevinYang (2004-2005);
- C.T. Lin (2004-2005)

6. IEEE Services:

6.1. Member, Board of Governor, CAS Society: Wai-Chi Fang (Jan 2004 to Dec 2006), Chin-Teng Lin (2005-2008)

6.2. VP-Region 10, IEEE CAS Society: Bin-Da Liu

- 6.3. Chair, Constitution and Bylaws Committee, CAS Society: Bing Sheu (till Aug. 2005)
- 6.4. Member, IEEE Systems Council AdCom: Wai Chi Fang
- 6.5. Chairman, Liaison and Transnational Committee, IEEE Systems Council: Wai Chi Fang
- 6.6. Chair, Van Valkenburg Award Subcommittee, CAS Society: Bing Sheu (2006).
- 6.7. Chapters Committee, IEEE Signal Processing Society (2006-2008): Jar-Ferr Kevin Yang
- 6.8. Treasurer, IEEE Tainan Section (2003 – 2005): Jar-Ferr Kevin Yang
- 6.9. Chairman, IEEE Signal Processing Society, Tainan Chapter (2004 – 2005): Jar-Ferr Kevin Yang
- 6.10. Chairman, Steering Committee for ICME, CAS Society: Pascal Frossard, Ching-Yung Lin
- 6.11. Member, Steering Committee for IEEE Trans. On Multimedia, CAS Society: Yu Hen Hu, Oscar C. Au
- 6.12. Chairman, Technical Committee on Nanoelectronics & Gigascale Systems, CAS Society: Wai-Chi Fang
- 6.13. Chairman, Technical Committee of Life Science Applications and Systems Technical committee, CAS Society: Jie Chen
- 6.14. Chairman, Technical Committee of QoSIG of Multimedia Communication, IEEE Communications Society: Qian Zhang.
- 6.15. Chairman, Technical Committee on Neural Systems and Applications, CAS: Chin-Teng Lin.

7. Award and Recognition

- 7.1. 2005 IEEE Fellow: Bin-Da Liu.
 - 7.2. Jie Chen co-edited a book “Genomic Signal Processing and Statistics” European Applied Signal Processing Inc. (2005), total 449 pages, ISBN: 9775945070
 - 7.3. Alexander Loui received the IEEE Circuits and Systems Society “Certificate of Appreciation” for the dedication and effort as an Associate Editor of the IEEE Trans. on Circuits and Systems Part II: Express Briefs (2004-2005).
 - 7.4. Alexander Loui received the Volunteer Appreciation Award, IEEE Rochester Section, 2005 for his dedication, valued services, and contributions.
 - 7.5. Wenjun Zeng, Heather Yu, and Ching-Yung Lin (eds.), "Multimedia Security Technologies for Digital Rights Management", Elsevier, June 2006.
- 8. The next MSA TC annual meeting will be held on May 23, 2005 (Tuesday, 1:20 pm – 2:30 pm) during the ISCAS2006, Island of Kos, Greece, May 21-24, 2005.**

Submitted by MSA TC on 17 May, 2006

Prepared by Dr. Oscar C. Au with inputs from TC members