

Technical Committee – Circuits and Systems for Communications (CASCOM)

Annual Report 6/2011 – 5/2012  
TC Chair for the period: Lap-Pui Chau

TC website: <http://ieee-cas.org/community/technical-committees/casctc>

1. TC memberships and appointments:
  - a. The TC now has 60 members, including 5 new members accepted by the TC on May 2012:
    - Jun Ma , Shanghai Jiaotong University, China
    - Zhengya Zhang, University of Michigan, USA
    - Qiaoyan Yu, University of New Hampshire, USA
    - Hsi-Pin Ma, National Tsing Hua University, Taiwan
    - Jongsun Park, Korea University, Korea
  - b. The TC has approved the following appointments effective May 2012:
    - TC Chair – Chang-Ho Lee (Qualcomm, USA)
    - TC Past Chair – Lap-Pui Chau (Nanyang Technological University, Singapore)
    - TC Vice-Chair (Chair-Elect) – Tokunbo Ogunfunmi (Santa Clara University, USA)
    - TC Secretary –
2. ISCAS 2012 involvements:
  - a. Our track (Track 3) received 184 papers, the 3<sup>rd</sup> largest track in ISCAS 2012.
  - b. Of the 184 papers that were submitted to our track, 81 papers were accepted (44% acceptance rate) in 10 lecture sessions and 6 poster sessions.
  - c. 3 TC members served as CASCOM track co-chairs, Lap-Pui Chau, Chang-Ho Lee, and Shoba Krishnan.
  - d. 17 TC members served as CASCOM track Reviewer Committee Members, Andrea Neviani, Gerald Sobelman, Hanho Lee, Hassan Aboushady, Joseph R. Cavallaro, Li Li, Maire O'Neill, Murat Torlak, Pui-In Mak, Tong Zhang, Tung-Sang Ng, Vassilis Paliouras, Wael Badawy, Wee Ser, Xinmiao Zhang, Zhiyuan Yan, Zhongfeng Wang
3. Awards & honors received by TC members (based on feedback from TC members):
  - a. Distinguished Lecturer, IEEE Broadcast Technology Society – Lap-Pui Chau
  - b. Distinguished Lecturer, IEEE Circuits and Systems Society, -- Joseph R. Cavallaro, Tokunbo Ogunfunmi
  - c. Best Paper Award: H. Sun, J. Zhao, F. Wang, N. Zheng, and T. Zhang, "Cost-Efficient Built-In Repair Analysis for Embedded Memories with On-Chip ECC," International Symposium on Access Spaces (IEEE-ISAS), June 2011, -- Tong Zhang
  - d. Distinguished Lecturer, Asia-Pacific Signal and Information Processing Association (APSIPA), 2012-2013 – Weisi Lin
4. TC members' service on journal editorial boards (based on feedback from TC members):
  - a. Associate Editor, IEEE Transactions on Circuits and Systems – I, -- Andrea Neviani, Xinmiao Zhang
  - b. Associate Editor, IEEE Transactions on Circuits and Systems – II, -- Tong Zhang

- c. Associate Editor, IEEE Transactions on Circuits and Systems for Video Technology, - Lap-Pui Chau
- d. Associate Editor, IEEE Transactions on Broadcasting, - Lap-Pui Chau
- e. Associate Editor, IEEE Transactions on Multimedia, -- Weisi Lin
- f. Associate Editor, IEEE Transactions on Signal Processing, -- Tong Zhang
- g. Area Editor, IEEE Transactions on Signal Processing, -- Zhiyuan Yan
- h. Associate Editor, IEEE Signal Processing Letters, - Lap-Pui Chau, Weisi Lin
- i. Senior Associate Editor, IEEE Signal Processing Letters -- Tokunbo Ogunfunmi
- j. Associate Editor, Circuits, Systems and Signal Processing -- Tokunbo Ogunfunmi
- k. Editorial Board, Journal of Visual Communication and Image Representation, -- Weisi Lin
- l. Associate Editor, Journal of Signal Processing Systems, -- Zhiyuan Yan
- m. Associate Editor, the Journal of Circuits, Systems, and Computers, Wiley Publication, -- Rajendra Katti, Andrea Gerosa
- n. Editorial Board member, International Journal of Reconfigurable Computing, Hindawi, — Maire O'Neill
- o. Associate editor, Journal of Multidimensional Systems and Signal Processing (Springer), —Nam Ling
- p. Editorial Board Member, Radioelectronics and Communications Systems, Kiev, Ukraine, — Alexander S. Korotkov
- q. Editorial Board Member, Proceedings of St. Petersburg Polytechnical University, Russia, — Alexander S. Korotkov
- r. Guest Editor, 2011 Special Issue on Algorithm and Implementation Aspects of Channel Codes and Iterative Receivers, *EURASIP Journal on Wireless Communications and Networking*, (with A. Burg, C. Studer, H. Meyr), -- Zhiyuan Yan

5. Conferences organized/chaired by TC members (based on feedback from TC members):

- a. General Co-Chair, IEEE International Conference on Multimedia Expo 2013 (ICME 2013), – Nam Ling
- b. Tutorial Co-Chair, IEEE ISCAS 2012, -- Nam Ling
- c. Technical Co-Chair of 7th Workshop on Embedded Systems Security (WESS), Tampere, Finland, October 2012, – Maire O'Neill
- d. Technical Co-Chair, 2012 Pacific Rim conference on Multimedia, Singapore, -- Weisi Lin
- e. Publication Co-Chair, IEEE Visual Communications and Image Processing (VCIP 2012), -- Weisi Lin
- f. Publication Co-Chair, APSIPA Annual Summit and Conference 2012, – Weisi Lin
- g. General Co-Chair, 3<sup>rd</sup> IEEE International Conference on Adaptive Science & Technology (ICAST'11), – Tokunbo Ogunfunmi
- h. Technical Program Co-Chair, Great Lakes Symposium on VLSI, May, 2012, -- Tong Zhang
- i. Finance Chair, SiPS (IEEE Workshop on Signal Processing Systems) 2012, -- Zhiyuan Yan
- j. Technical Area Chair (TAC), 2012, 46th Asilomar Conference on Signal, Systems, and Computers, Pacific Grove, CA, for Area G, Architecture and Implementation, (Nov. 2012), -- Zhiyuan Yan
- k. Program Committee Co-Chair, 2012 IEEE/ACM GLSVLSI, Salt Lake City, Utah, (May 2012), -- Zhiyuan Yan
- l. Program Committee Co-Chair, 2011 IEEE International Conference on Application-specific Systems, Architectures and Processors (ASAP), Santa Monica, CA, (September 2011), -- Zhiyuan Yan

6. Participations in conference committees by TC members (based on feedback from TC members):

Many of our TC members were active in many conference technical program committees, organizing committees, and served as many track chairs and session chairs. The list of participations is very long and therefore not listed here.

7. Books published by TC members:

- a. W. Lin, D. Tao, J. Kacprzyk, Z. Li, E. Izquierdo, H. Wang (eds.), *Multimedia Analysis, Processing and Communications*, Springer, 2011. -- Weisi Lin

8. Invited talks by TC members (based on feedback from TC members):

- a. National Taipei University of Technology – Lap-Pui Chau
- b. ICT Knowledge Transfer Network (KTN) Cyber Security Summit, Brussels, March 2012 — Maire O'Neill
- c. 21st Annual Wireless and Optical Communications Conference (WOCC 2012), "Squeezing More Bits Out of Bitstream: New Paradigms for Video Compression", Taiwan, 19 April 2012, -- Weisi Lin
- d. VLSI architecture design for algebraic soft-decision Reed-Solomon decoding," International Workshop on Coding and Cryptology, Qingdao, China, May 2011. -- Xinmiao Zhang
- e. International Conference on IC Design and Technology (ICICDT 2012), invited talk on "Low-Power Ultra-Wide-Band Impulse Radio Transceivers for Short Range Communications" -- Andrea Neviani
- f. Keynote Speech, "Video Compression – A New Era," 3<sup>rd</sup> IEEE International Conference on Adaptive Science and Technology (ICAST), Abuja, Nigeria, November 24 – 26, 2011, — Nam Ling
- g. Invited Lecture, "Video Compression Technology - On Building the Next Generation," IEEE Circuits and Systems (CAS) Society Santa Clara Valley Chapter, Santa Clara, California, U.S.A, September 26, 2011, — Nam Ling
- h. Invited Talk at International Conference on Adaptive Science & Technology (ICAST'11) titled "Talk is Cheap: Advanced Speech Processing is Here" – Tokunbo Ogunfunmi
- i. Invited talks titled "New Algorithms for Fast Motion Estimation in H.264/AVC" and "New Hardware Architectures for Fast Motion Estimation in H.264/AVC", to the IEEE CASS Local Chapter Members at the Universidade Federale do Rio do Grande Sul (UFRGS), Porto Alegre, Brazil, May 2011, – Tokunbo Ogunfunmi
- j. Tutorial: Advances in Speech Coding, Speech Recognition and Applications, Tutorial to be presented at the ISCAS 2012 conference, Seoul, Korea, May 2012, – Tokunbo Ogunfunmi
- k. National Tsing Hua University, 2011 IEEE Signal Processing Society Summer School, High Dynamic Range Image Processing July 2011, – Zhengguo Li

9. Others professional activity by TC members (based on feedback from TC members):

- a. Many of our TC members were active as reviewers for several journals and conferences. The list of participations is very long, and therefore not listed here.
- b. Co-chair, Interest Group (IG) on QoE for Multimedia Communications during 2010-2012, IEEE MMTC, -- Weisi Lin