

Technical Committee – Circuits and Systems for Communications (CASCOM)

Annual Report 5/2010 – 5/2011  
TC Chair for the period: Lap-Pui Chau

TC website: <http://www.cacs.louisiana.edu/cas/members.htm>

1. TC memberships and appointments:
  - a. The TC now has 60 members, including 3 new members accepted by the TC on May 2010:
    - Joseph Cavallaro, Rice University, USA
    - Lan-Da Van, National Chiao Tung University, Taiwan
    - Lily Li, Nanjing University, China
  - b. The TC has approved the following appointments effective May 2010:
    - TC Chair - Lap-Pui Chau (Nanyang Technological University, Singapore)
    - TC Past Chair - Gerald Sobelman (University of Minnesota, USA)
    - TC Vice-Chair (Chair-Elect)– Chang-Ho Lee (Samsung, USA)
    - TC Secretary – Shoba Krishnan (Santa Clara University, USA)
    - TC Webmaster – Mohamed Elgamel (University of Louisiana, USA)
2. ISCAS 2011 involvements:
  - a. Our track (Track 3) received 156 papers.
  - b. Of the 156 papers that were submitted to our track, 79 papers were accepted (51% acceptance rate) in 13 lecture sessions (65 papers) and 3 poster sessions (14 papers).
  - c. 2 special sessions are proposed.
  - d. TC members Gerald Sobelman, Lap-Pui Chau and Chang-Ho Lee served as CASCOM track co-chairs.
  - e. Many TC members served as RCMs, reviewers and session chairs.
3. Future ISCAS involvements:
  - a. ISCAS 2012: TC member Myung Hoon Sunwoo will be the General Chair of ISCAS 2012, to be held in Incheon, South Korea.
  - b. ISCAS 2012: TC Past Chair Gerald Sobelman will be Special Session Chair of ISCAS 2012.
4. Conference Technical Co-Sponsorship:
  - a. 10<sup>th</sup> International Symposium on Communications and Information Technologies (ISCIT 2010), to be held October 26-29, 2010 in Tokyo, Japan.
5. Awards & honors received by TC members (based on feedback from TC members):
  - a. Elevated IEEE Fellow, -- Myung Hoon Sunwoo
  - b. Distinguished Lecturer, IEEE Broadcast Technology Society – Lap-Pui Chau
  - c. Distinguished Lecturer, IEEE Circuits and Systems Society – Wee Ser
  - d. SDR Forum Outstanding Paper Award, (with K. Amiri, C. Dick, R. Rao), Nov.-Dec. 2010. -- Joseph R. Cavallaro
  - e. Best Paper Award, International Symposium on Low Power Electronics and
  - f. Design (ISLPED), Aug. 2010, -- Tong Zhang
  - g. University Endowed Chair Professor, 9/2010 - present. – Nam Ling

- h. Distinguished invited lecture speaker, IEEE ICIEA 2010, 6/2010. – Nam Ling
  - i. IEEE CASS Outstanding Young Author Award -- Pui-In Mak
6. TC members' service on journal editorial boards (based on feedback from TC members):
- a. Associate Editor, IEEE Transactions on Circuits and Systems – I, -- Ming-Der Shieh, Andrea Neviani, Xinmiao Zhang, Pui-In Mak
  - b. Associate Editor, IEEE Transactions on Circuits and Systems – II, -- Tong Zhang, Zhongfeng Wang, Pui-In Mak
  - 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 VLSI, -- Zhongfeng Wang
  - g. Associate Editor, IEEE Transactions on Signal Processing, -- Tong Zhang
  - h. Associate Editor, IEEE Signal Processing Letters, - Lap-Pui Chau, Weisi Lin
  - i. Associate Editor, IEEE Technology News, - Lap-Pui Chau
  - j. Associate Editor, Circuits, Systems and Signal Processing -- Tokunbo Ogunfunmi
  - k. Associate Editor, IEEE Journal – Hanho Lee
  - l. Editorial Board, Journal of Visual Communication and Image Representation, -- Weisi Lin
  - m. Journal of Signal Processing Systems, Springer, 2011, -- Myung Hoon Sunwoo
  - n. Associate Editor, the Journal of Circuits, Systems, and Computers, Wiley Publication, -- Rajendra Katti, Andrea Gerosa
  - o. Associate editor, International Journal of Circuits, Systems and Computers, -- Xinmiao Zhang
  - p. Guest Editor, Journal of Electrical and Computer Engineering, -- Zhongfeng Wang
  - q. Guest Co-Editor, Journal of Signal Processing Systems for Signal, Image, and Video Technology (Special Issue) Springer, 9/2010. – Nam Ling
  - r. Guest Editor, 2011 Special Issue on Algorithm and Implementation Aspects of Channel Codes and Iterative Receivers, EURASIP Journal on Wireless Communications and Networking.—Joseph R. Cavallaro
7. Conferences organized/chaired by TC members (based on feedback from TC members):
- a. Technical Program Co-Chair, The 18th International Symposium on Intelligent Signal Processing and Communications Systems (ISPACS 2010), Chengdu, China, December 6-8, 2010 - Lap-Pui Chau
  - b. Special session chair, International Conference on Information, Communications and Signal Processing (ICICS2011), Singapore, December 2011. – Lap-Pui Chau
  - c. General Co-chair, International Conference on Adaptive Science and Technology (ICAST), Abuja, Nigeria, Nov. 2011. – Tokunbo Ogunfunmi
  - d. Secretary General, 2010 International Conference on Electronics, Information, and Communication (ICEIC 2010) – Hanho Lee
  - e. Local Arrangement Chair, 2010 International SoC Design Conference (ISOCC2010) – Hanho Lee
  - f. General chair of 2010 VLSI Design/CAD symposium, Taiwan -- Ming-Der Shieh
  - g. General chair Eurocrypt 2010, May 30 – June 3, Nice, France -- Matt Robshaw
  - h. Secretary of 2011 International Symposium on VLSI Design, Automation, and Test Symposium. -- Ming-Der Shieh
  - i. Special Session Organizer : 'Quantum-Dot Cellular Automata (QCA) Circuit Design' at ISCAS 2011.- - Maire O'Neill

- j. Special Session Organizer: International Conference on Green Circuits and Systems (ICGCS) (2010), Session Title: Green Technologies for Reliable Circuits and Advanced Systems -- Lan-Da Van
  - k. Member of Steering Committee for Fast Software Encryption (FSE) Conferences, -- Matt Robshaw
  - l. Technical chair of IEEE ICIEA 2010, -- Zhengguo Li
  - m. General chair of IEEE ICIEA 2011, -- Zhengguo Li
  - n. Organized invited sessions for MMSP 2011, -- Zhengguo Li
  - o. Organized invited sessions APSIPA ASC 2011, -- Zhengguo Li
  - p. Program Co-Chair of 2011 DAC Workshop on Diagnostic Services in Network-on-Chips, June 5<sup>th</sup> 2011, San Diego, USA. – Li Li
  - q. Tutorial Co-Chair, IEEE Int’l Conf. Multimedia and Expo (ICME), 2010, -- Weisi Lin
  - r. International Liaison Co-Chair, IEEE Int’l Conf. Multimedia and Expo (ICME), 2011, -- Weisi Lin
  - s. Technical Program Co-Chair, IEEE APCCAS 2010, – Nam Ling
  - t. Technical Program Co-Chair, APSIPA 2010,– Nam Ling
  - u. 2011 IEEE International Symposium on Circuits and Systems, Steering Committee -- Myung Hoon Sunwoo
  - v. 2010 IEEE International SoC Conference (ISOCC 2010), International Liaison Chair. -- Myung Hoon Sunwoo
  - w. 2010 Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia 2010), International Advisor. -- Myung Hoon Sunwoo
  - x. 2010 IEEE Asian Pacific Conference on Circuits and Systems (APCCAS 2010), International Advisory Committee. -- Myung Hoon Sunwoo
  - y. Student Paper Contest Chair, Asilomar Conference on Signals, Systems, and Computers 2010, -- Xinmiao Zhang
  - z. Organization Committee, IEEE Asia Pacific Conf. on Postgraduate Research in Microelectronics and Electronics – PrimeAsia’2010, Shanghai -- Pui-In Mak  
Organization Committee, IEEE International Symposium on Circuits and Systems – ISCAS’2010, France -- Pui-In Mak
8. 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.
9. 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
  - b. Yehya Ghallab and Wael Badawy, Lab-on-a-chip, Techniques, Circuits, and Biomedical Applications, Artech House, ISBN: 1-59693-418-2, July 2010. -- Wael Badawy
10. Invited talks by TC members (based on feedback from TC members):
- a. Tsinghua University – Lap-Pui Chau
  - b. Beijing Jiaotong University – Lap-Pui Chau
  - c. Seminar, Dept. of Electrical and Computer Engineering, University of Minnesota, – Hanho Lee
  - d. Seminar, Bell Labs., Alcatel-Lucent – Hanho Lee
  - e. Android workshop in Taiwan, -- Ming-Der Shieh
  - f. Invited speaker at Workshop of Applied Cryptography, Singapore, -- Matt Robshaw
  - g. Invited speaker at Royal Holloway, University of London, -- Matt Robshaw

- h. IEEE COMSOC MMTC, QoEIG Keynote Speech, IEEE Multimedia Communications Technical Committee (MMTC), A Survey of Perceptual Quality Metrics for Images and Videos, Mar 2011 -- Weisi Lin
- i. Tutorial at IEEE Int'l Conf. on Image Processing (ICIP 2010) -- Weisi Lin
- j. Invited seminars, Shanghai Jiao Tong Univ (9/2010), -- Nam Ling
- k. Invited seminars, Nanyang Technological Univ (12/2010). -- Nam Ling
- l. Keynote Speaker, 2010 IEEE International Symposium on Next-Generation Electronics (ISNE), 2010.12.19, Taiwan, -- Myung Hoon Sunwoo
- m. University of Swansea, UK, July 2010 -- Myung Hoon Sunwoo
- n. University of Westminster, UK, July 2010 -- Myung Hoon Sunwoo
- o. "Reduced-complexity decoder architecture for non-binary LDPC codes," University of Minnesota, Minneapolis, MN, Jun. 2010. -- Xinmiao Zhang
- p. "Reduced-complexity decoder architecture for non-binary LDPC codes," Tianjin University, Tianjin, China, May 2010. -- Xinmiao Zhang
- q. "A 0.46mm<sup>2</sup> 4-dB NF Unified Receiver Front-End for Full-Band Mobile TV in 65-nm CMOS," University of California Berkeley, Feb., 2011. -- Pui-In Mak
- r. "High-/Mixed-Voltage Analog and RF Circuit Techniques for Nanoscale CMOS Technologies," Hong Kong University of Science and Technology, Hong Kong, China, Dec. 2010. -- Pui-In Mak
- s. "High-/Mixed-Voltage Analog and RF Circuit Techniques for Nanoscale CMOS Technologies," University of Pavia, Italy, Nov. 2010. -- Pui-In Mak

11. 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. Secretary of the Technical Committee on Circuits and Systems for Education and Outreach (CASEO), IEEE Circuits and Systems Society. -- Tokunbo Ogunfunmi
- c. Chair, Student Travel Grants, 2010 IEEE International Symposium on Information Theory, Austin, TX, (June 2010) -- Joseph R. Cavallaro
- d. Chairman of IEEE CAS Tainan Chapter (2000~2010). -- Ming-Der Shieh
- e. Interview Panel member for UK Engineering and Physical Sciences Research Council (EPSRC) Challenging Engineering Awards, 2010.-- Maire O'Neill
- f. Invited member of a Young Advisors Group to Commissioner Neelie Kroes, Vice President of the European Commission and Commissioner for the European Digital Agenda, 2010.-- Maire O'Neill
- g. Chair, Interest Group (IG) on QoE for Multimedia Communications during 2010-2012, IEEE MMTC, -- Weisi Lin
- h. Guest Professor (Shanghai Jiao Tong Univ), -- Nam Ling
- i. Consulting Professor (National Univ. of Singapore), -- Nam Ling
- j. Integrated Undergrad Engineering Advisory Committee (Univ. of Hawaii at Hilo), -- Nam Ling
- k. Advisory Board (IEEE DISPS TC). -- Nam Ling
- l. Honoured with the Standard Council of Canada, Award of Excellence, 2010 -- Wael Badawy
- m. Named in the Top 40 under 40, Avenue Magazine, 2010 -- Wael Badawy
- n. Honoured with the Distinguished Professional Awards by Immigrant Services Calgary 2010, -- Wael Badawy
- o. Honoured with the Nomination for the Manning Awards by the Southern Alberta Manning Chapter 2010-- Wael Badawy