

## ANNUAL REPORT 2005 DSP TC, IEEE CAS SOCIETY

Chairman: Prof. H. K. Kwan  
Secretary: Prof. Y. Miyanaga  
Past Chairman: Prof. T. Saramäki

- 1 TC Meeting: The last TC Annual Meeting was held on May 26, 2004, Wednesday, 13:00 to 14:00 at a meeting room, Sheraton Vancouver Wall Centre Hotel, Vancouver, Canada, during the IEEE International Symposium on Circuits and Systems, Vancouver, Canada, May 23-26, 2004.
  
- 2 Conferences or Workshops where the DSP TC or Members of the TC was/were actively involved in 2004-2005 include the followings:
  - 2.1 2004 IEEE International Symposium on Circuits and Systems (ISCAS 2004), Vancouver, Canada, May 23-26, 2004.
    - Technical Program Committee:  
Digital Signal Processing Track Chair: Prof. Tapio Saramäki  
Neural Systems and Applications Track Chair: Prof. H. K. Kwan
    - Publication Chair: Prof. Wu-Sheng Lu
    - Review Committee Members:  
Prof. Ioan Tabus, Markku Renfors, Olli Vainio, Segio Netto, H. K. Kwan, Mohammed Y. Niamat, Truong Nguyen, Dominic Ho, Zhiping Lin, Wan-Chi Siu, Yong Ching Lim, Yoshikazu Miyanaga, Yong Lian, Soontorn Oraintara, Maurice Bellanger, Karen Egiazarian, Josef A. Nossek, Say Wei Foo, Moncef Gabbouj, Sergios Theodoridis, Yuan-Pei Lin, Ravi Ramachandran, Wei Xing Zheng, Lina Karam, Mohsin Jamali, P. P. Vaidyanathan, A. N. Venetsanopoulos, Wu-Sheng Lu, U. B. Desai, Masayuki Kawamata, Mohamed Najim, See-May Phoong, Ioannis Pitas, Enis Cetin, Takao Hinamoto, Andreas Spanias, Chan Shing-Chow, Håkan Johansson, and Thanos Stouraitis.
    - Co-Organizers and Co-Chairs of Invited Sessions:
      - “Frequency Response Masking Technique” (Sponsored by DSP TC): Prof. Yong Lian and Prof. Håkan Johansson.
      - “Advances in Speech Processing and Applications” (Sponsored by DSP TC): Prof. K. C. Ho, R. P. Ramachandran, and H. K. Kwan.
      - “Smart Multi-Media Systems” (Sponsored by DSP TC): Prof. Y. Miyanaga.
      - “Multirate Systems for Communications” (Sponsored by DSP TC): Prof. See-May Phoong and Yuan-Pei Lin.
    - Technical Session Chairs:
      - ”FIR Digital Filters”: Prof. Yong Ching Lim, Prof. Yong Lian.
      - ”IIR Digital Filters”: Prof. Håkan Johansson
      - "Digital Filters": Prof. Takao Hinamoto, Prof. Håkan Johansson.

- "Digital Filter Banks": Prof. Wu-Sheng Lu, Prof. See-May Phoong.
  - "Digital Signal Processing Applications I": Prof. Dominic K. C. Ho, Prof. Yuan-Pei Lin.
  - "Digital Signal Processing Applications II": Prof. Yuan-Pei Lin, Prof. Dominic K. C. Ho.
  - "Multidimensional Signal Processing I": Prof. Zhiping Lin, Prof. Ioannis Pitas.
  - "Multidimensional Signal Processing II": Prof. Soontorn Oraintara, Prof. Ioannis Pitas.
  - "Discrete-Time Transforms and Wavelets": Prof. See-May Phoong, Prof. Tapio Saramäki.
  - "Implementation of DSP Algorithms": Prof. Thanos Stouraitis.
  - "Digital Signal Processing": Prof. Tapio Saramäki.
  - "Detection and Estimation", Prof. Wei Xing Zheng, Prof. Moncef Gabbouj.
  - "Adaptive Signal Processing I": Prof. Uday B. Desai, Prof. Wei Xing Zheng.
  - "Adaptive Signal Processing II": Prof. Paulo Diniz, Prof. Uday B. Desai.
  - "Digital Signal Processing for Communications I": Prof. See-May Phoong,
  - "Digital Signal Processing for Communications II", Prof. Markku Renfors, Prof. Wei Xing Zheng.
  - "Audio and Speech Processing I": Prof. Yoshikazu Miyanaga, Prof. Sergios Theodoridis.
  - "Audio and Speech Processing II": Prof. Sergios Theodoridis, Prof. Yoshikazu Miyanaga.
  - "Digital Filters and Filter Banks": Prof. Andreas Spanias,
  - "Discrete-Time Transforms and Wavelets", Prof. Soontorn Oraintara.
  - "Digital Signal Processing I": Prof. Dominic K. C. Ho.
  - "Digital Signal Processing IV": Prof. Zhiping Lin.
  - "Digital Signal Processing V": Prof. Paulo Diniz.
  - "Digital Signal Processing VI": Prof. Wei Xing Zheng.
- 2.2 47<sup>th</sup> IEEE International Midwest Symposium on Circuits and Systems (MWSCAS 2004), Hiroshima, Japan, July 25-28, 2004.
- General Chair: Prof. Takao Hinamoto.
  - Advisory Committee: Profs. M. N. S. Swamy, and A. N. Venetsanopoulos.
  - Special Session Co-Chair: Prof. Wu-Sheng Lu.
  - Publicity Committee: Profs. Yoshikazu Miyanaga, Y. C. Lim, Soo-Chang Pei, and Wan-Chi Siu.
  - Technical Program Committee:
    - Digital Circuits and Computer Arithmetic Track Co-Chair: Prof. K. K. Parhi
    - Adaptive Signal Processing Track Co-Chair: Prof. P. S. R. Diniz
    - Image Processing and Multimedia Systems Track Co-Chair: Prof. S. Basu.
    - Neural Networks and Fuzzy Systems Track Co-Chair: Prof. H. K. Kwan.

- 2.3 2004 First International Symposium on Control, Communications and Signal Processing (ISCCSP 2004), Hammamet, Tunisia, March 21-24, 2004. Technical Program Chair: Prof. Moncef Gabbouj.
- 2.4 The 6th International Conference and Exhibition on Digital Signal Processing and its Applications (DSPA 2004), Moscow, Russia, March 31–April 2, 2004. International Technical Program Committee Member: Prof. Tapio Saramäki.
- 2.5 The 12th IEEE Mediterranean Electrotechnical Conference (MELECON 2004), Dubrovnik, Croatia, May 12–15, 2004. Technical Program Committee Member: Prof. Tapio Saramäki. Best Student Paper Award: His student Yaning Zou took part in the contest during the conference.
- 2.6 2004 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 04), Montréal, Canada, May 17-21, 2004. Technical Committee Member: Prof. Lina Karam. Review Committee Member: Prof. Ravi P. Ramachandran.
- 2.7 The Sixth Nordic Signal Processing Symposium (NORSIG 2004), Meripuisto, Espoo, Finland June, 9–11, 2004. Tutorial Chair: Prof. Tapio Saramäki. Tutorial Session: “Non-Uniform Sampling and Polynomial-Based Interpolation”: Prof. Tapio Saramäki. Technical Committee Member: Prof. Tapio Saramäki.
- 2.8 2004 IEEE International Conference on Communications (ICC 2004), Paris, France, June 23-26, 2004. Co-Organizer and Co-Chair: “High-Speed Networking”: Prof. Joseph B. Evans.
- 2.9 IEEE International Conference on Multimedia & Expo (ICME 2004), Taiwan, June 27-30, 2004. Technical Program Committee Member: Prof. Ioannis Pitas.
- 2.10 The 2004 International Conference on Dynamics, Instrumentation and Control (CDIC2004), Nanjing, China, August 18-20, 2004. International Program Committee Member: Prof. Wei Xing Zheng.
- 2.11 The 2004 IEEE Symposium on Neural Networks (ISNN 2004), Dalian, China, August 19-21, 2004. Program Committee Members: Prof. H. K. Kwan, Prof. Wei Xing Zheng.
- 2.12 2004 IASTED Signal and Image Processing (SIP 2004), Hawaii, USA, August 23-27, 2004. International Program Committee Member: Prof. Yong Lian.
- 2.13 IEEE Electro/Information Technology Conference (EIT 2004), Milwaukee, Wisconsin, Session Signal Processing 1, August 26-27, 2004. Technical Session Chair on Communications: Prof. H. K. Kwan.
- 2.14 The 2004 International Workshop on Spectral Methods and Multirate Signal Processing (SMMSP 2004), Vienna, Austria, September 11-12, 2004. The main purpose of the workshop was to bring together some of the leading experts working on transforms, filter banks, and multirate filtering in general and to create a friendly and relaxed atmosphere to talk about the most important issues in these fields. We managed very well and ended up with the proceedings of 50 articles. See <http://sigwww.dmi.tut.fi/TICSP/>. Co-Chairmen: Profs. Karen Egiazarian and Tapio Saramäki.
- 2.15 Fourteenth International Workshop on Power and Timing Modeling, Optimization and Simulation (PATMOS 2004), Isle of Santorini, Greece, September 15 - 17, 2004. TP Committee Member: Prof. T. Stouraitis.

- 2.16 4th Int'l Symposium on Image and Signal Processing and Analysis (ISPA 2004), Zagrab, 2004. Program Committee Member: Prof. Ioannis Pitas.
- 2.17 IEEE Workshop on Signal Processing Systems (SiPS 2004), Crowne Plaza Hotel, Austin, Texas, USA, October 13-15, 2004. TP Committee Member: Prof. T. Stouraitis.
- 2.18 International Symposium on Intelligent Multimedia, Video, and Speech Processing (ISIMP 2004), Hong Kong, Oct. 20-22, 2004. Technical Session Chair on Speech Processing and Recognition: Prof. H. K. Kwan.
- 2.19 Eleventh IEEE International Conference on Image Processing (ICIP 2004), Singapore, October 24-27, 2004. Technical Committee Member: Prof. Lina Karam. Session Chairs: Prof. Ioannis Pitas, Prof. Lina Karam. Special Session Co-organizer: "Content-based Analysis of Multi-modal High-dimensional Medical Images": Prof. Zhiping Lin.
- 2.20 IEEE International Symposium on Communications and Information Technologies 2004 (ISCIT 2004), Sapporo, Japan, October 27- 29, 2004. General Chair: Prof. Y. Miyanaga.
- 2.21 Third International Workshop on Digital Watermarking (IWDW 2004), Seoul, Korea, October 30 - November 1, 2004. Program Committee Member: Prof. Ioannis Pitas.
- 2.22 The 47th annual IEEE Global Telecommunications Conference (GLOBECOM 2004), Dallas, Texas, November 29 -December 3, 2004. Technical Program Committee Member: Prof. Joseph B. Evans.
- 2.23 The 2004 IEEE International Workshop on Biomedical Circuits and Systems (BioCAS 2004) in Marian Mandarin Hotel, Singapore, December 1 – 3, 2004. General Co-Chair: Prof. Yong Lian. International Coordinator: Prof. Y.C. Lim.
- 2.24 The 2004 IEEE Asia-Pacific Conference on Circuits and Systems, (APCCAS2004), Tainan, Taiwan, Dec. 6-9, 2004. Technical Program Committee Member: Prof. Yong Lian.
- 2.25 The 11th IEEE International Conference on Electronics, Circuits, and Systems, (ICECS 2004), Tel-Aviv, Israel, December 13-15, 2004. TP Committee Member: Prof. T. Stouraitis. Steering Committee Member: Prof. T. Stouraitis.
- 2.26 the 43rd IEEE Conference on Decision and Control (CDC 2004), Atlantis, Paradise Island, Bahamas, December 14-17, 2004. Program Committee Member: Prof. Wei Xing Zheng.
- 2.27 The 4th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT 2004), Jolly Hotel-Vittorio Veneto, Rome, Italy, December 18-21, 2004. Technical Program Committee Member: Prof. Ioannis Pitas.
- 2.28 The First International Workshop on Video Processing and Quality Metrics for Consumer Electronic (VPQM 2005), Scottsdale, Arizona, USA, January 23-25, 2005. <http://www.vpqm2005.org/>. Main Organizer: Prof. Lina Karam. Technical Program Chair: Prof. Lina Karam
- 2.29 IEEE INFOCOM 2005, Miami, Florida, March 13-17, 2005. Technical Program Committee Member: Prof. Joseph B. Evans.
- 2.30 The 7th International Conference and Exhibition on Digital Signal Processing and its Applications (DSPA 2005), Moscow, Russia, March 16–18, 2005. International Technical Program Committee: Prof. Tapio. Saramäki.

- 2.31 The IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2005), Philadelphia, PA, March 18-22, 2005. Technical Session Chair: Prof. Lina Karam. Technical Committee Members: Prof. Lina Karam, Dr. Ravi P. Ramachandran.
- 2.32 The 2005 IEEE International Conference on Networking, Sensing and Control (ICNSC 2004), Tucson, Arizona, USA, March 19-22, 2005. International Program Committee Member: Prof. Wei Xing Zheng.
- 2.33 International Conference on Visual Information Engineering (VIE 2005), University of Glasgow, Glasgow, UK, April 4-6, 2005. Corresponding PC Member: Prof. Ioannis Pitas.
- 3 On going Conferences or Workshops where the DSP TC or Members of the TC is/are actively involved include the followings:
- 3.1 2005 IEEE International Symposium on Circuits and Systems (ISCAS 2005), Kobe International Convention Center, Kobe, Japan, May 23-26, 2005.
- DSP Track Chair: Prof. H. K. Kwan, Co-Chair: Prof. Tapio Saramäki.
  - Review Committee Members:  
 Profs. Lian Yong, U. B. Desai, Mohammed Y. Niamat, Ravi Prakas Ramachandran, P. P. Vaidyanathan, S. C. Chan, Behrouz Nowrouzian, Dominic Ho, Yuan-Pei Lin, Lina Karam, Lim Yong Ching, See-May Phoong, Wei Xing Zheng, Zhiping Lin, Truong Nguyent, Xinping Huang, Mohsin Jamali, Soontorn Oraintara, Gwee Bah Hwee, Håkan Johansson, Andreas Spanias, Yoshikazu Miyanaaga and I. Pitas.
  - Tutorial Co-Chair: Prof. Y. Miyanaaga.
  - Lecturer of Tutorial Session: “Digital Filters on Silicon: Design and Implementation”, (Sponsored by DSP TC), Prof. Y. C. Lim.
  - Co-Organizers and Co-Chairs of Invited Sessions:
    - “Low Complexity Digital Filter Design Technologies and Their Applications”, (Sponsored by DSP TC), Prof. Yong Lian.
    - “Multidimensional Systems and Signal Processing”, (Sponsored by DSP TC), Prof. Zhiping Lin.
    - “Advances in Low Power Sensor Networks”, (Sponsored by DSP TC), Prof. Andreas Spanias.
  - Technical Session Chairs:
    - "FIR Digital Filters": Masayuki Kawamata, Y. C. Lim,
    - "IIR Digital Filters": H. K. Kwan.
    - "Digital Filters I": Takao Hinamoto, Tapio Saramäki.
    - "Digital Filter Banks I": Soontorn Oraintara.
    - "Digital Signal Processing I": S. C. Chan.
    - "Multidimensional Signal Processing": M. N. S. Swamy.
    - "Discrete Transforms and Wavelets": W. C. Siu.
    - "Detection and Estimation": Yih-Fang Huang.
    - "Adaptive Signal Processing I": Paulo Diniz.
    - "Adaptive Signal Processing II": Dominic K. C. Ho.
    - "Audio and Speech Processing I": Ravi Prakas Ramachandran.

- "Audio and Speech Enhancement I": Say Wei Foo.
  - "Digital Signal Processing for Communications I": Yoshikazu Miyanaga.
  - "Digital Signal Processing for Communications II": See-May Phoong.
  - "Digital Filters II": Yong Lian.
  - "Digital Signal Processing II": Zhiping Lin.
  - "Adaptive Signal Processing III": Wei Xing Zheng.
  - "Digital Signal Processing Applications III": Yuan-Pei Lin.
  - "Digital Signal Processing Algorithm Implementation II": U. B. Desai.
- 3.2 International Workshop Audio—Visual Content and Information Visualization in Digital Libraries, (AVIVDiLib 2005), Cortona, May 4-6, 2005. Program Committee Member: Prof. Ioannis Pitas.
  - 3.3 2005 IEEE – EURASIP Workshop on Nonlinear Signal and Image Processing (NSIP 2005), Sapporo, Japan, May 18-20, 2005. General Co-Chair: Prof. Y. Miyanaga.
  - 3.4 International Symposium on Neural Networks (ISNN 2005), May 30 - June 1, 2005, Chongqing, China. Program Committee Member: Prof. H. K. Kwan.
  - 3.5 The 2005 International Workshop on Spectral Methods and Multirate Signal Processing (SMMSIP 2005), Riga, Latvia, June 20–22, 2005. <http://sigwww.dmi.tut.fi/TICSP/>. The main purpose of the workshop serves as again to bring together some of the leading experts working on transforms, filter banks, and multirate filtering in general and to create a friendly and relaxed atmosphere to talk about the most important issues in these fields. Co-Chairmen : Profs. Karen. Egiazarian and Tapio Saramäki.
  - 3.6 The 4-th Workshop on Content-Based Multimedia Indexing (CBMI 2005), Reval Hotel Latvija, Riga, Latvia, June 22-24, 2005. The workshop is about content-based multimedia indexing and retrieval and has been co-sponsored by the DSP TC. General Chair: Prof. Moncef Gabbouj. Technical Program Committee Member: Prof. Ioannis Pitas.
  - 3.7 The 20th IEEE International Symposium on Intelligent Control (ISIC 2005), Limassol, Cyprus, June 27-29, 2005. International Program Committee Member: Prof. Wei Xing Zheng.
  - 3.8 IEEE International Conference on Multimedia & Expo. (ICME 2005), July 6-8, 2005, Amsterdam, The Netherlands. Program Committee Member: Prof. Ioannis Pitas.
  - 3.9 ROVISIP 2005 International Conference on Robotics, Vision, Information and Signal Processing (ROVISIP 2005), Penang, Malaysia, 20-22 July 2005. Organizing Committee Member: Prof. Mohsin M. Jamali.
  - 3.10 2nd International Workshop on Pattern Recognition with Support Vector Machines (SVM 2005), Seoul, Korea, August 27-28, 2005. Program Committee Member: Prof. Ioannis Pitas.
  - 3.11 The 8th International Symposium on Signal Processing and Its Applications (ISSPA 2005), Sydney, Australia, August 29-September 1, 2005. Program Committee Members: Prof. Ioannis Pitas, Prof. Wei Xing Zheng. Special Session Organizer and Chair: "Blind System Identification": Prof. Wei Xing Zheng.

- 3.12 European Conference on Circuits Theory and Design (ECCTD 2005), Cork, Ireland, 29 August–1 September 2005. Scientific Committee Member: Prof. Tapio Saramäki.
- 3.13 9th European Conference on Speech Communication and Technology, (InterSpeech 2005), September 4-8, 2005, Lisbon, Portugal. Scientific Review Committee Member: Prof. H. K. Kwan.
- 3.14 The 11th International Conference on Computer Analysis of Images and Patterns (CAIP2005), Paris, France, Sept. 5-9, 2005. Program Committee Member: Prof. Ioannis Pitas.
- 3.15 2005 IEEE International Conference on Image Processing (ICIP 2005), Genova, Italy, September 11 -14, 2005. Technical Committee Member: Prof. Ioannis Pitas, Prof. Lina Karam.
- 3.16 International Workshop on Intelligent Information Hiding and Multimedia Signal Processing (IHMSP 2005), Hilton Hotel, Melbourne, Australia, September 14 – 16, 2005. Technical Program Committee Member: Prof. H. K. Kwan.
- 3.17 The Fourth International Symposium on Image and Signal Processing and Analysis (ISPA 2005), Zagreb, Croatia, September 15-17, 2005. Program Committee Member: Prof. Tapio Saramäki. Special Session Organizers: “Spectral Methods and Multirate Signal Processing”: Prof. Karen Egiazarian, Prof. Tapio Saramäki.
- 3.18 IEEE Advanced Video and Signal Based Surveillance (AVSS 2005), Como, Italy, September 15-19, 2005. Program Committee Member: Prof. Ioannis Pitas.
- 3.19 International Symposium on Communications and Information Technologies 2005 (ISCIT 2005), International Convention Center, Beijing , China, October 12- 14, 2005. General Co-Chair: Prof. Yoshikazu Miyanaga.
- 3.20 Intern. Conf. On Technology and Automation 2005, ICTA2005, Thessaloniki, Greece, October 15-16, 2005. Program Committee Member: Prof. Ioannis Pitas.
- 3.21 The 11th Asia-Pacific Conference on Communications (APCC 2005), Perth, Australia, Oct. 3-5, 2005. Program Committee Member: Prof. Håkan Johansson.
- 3.22 The IEEE 2005 Workshop on Signal Processing Systems (SiPS 2005), Athens, Greece, November 2-4, 2005. General Chair : Prof. T. Stouraitis.
- 3.23 The 10th Panhellenic Conference on Informatics (PCI 2005), Volos, Greece, November 11-13, 2005. Session Organizer: Prof. Ioannis Pitas.
- 3.24 The International Conference on “Computer as a tool” (EUROCON 2005), November 21–24, 2005, Sava Center, Belgrade, Serbia & Montenegro. Scientific Committee Member: Prof. Håkan Johansson, Prof. Tapio Saramäki.
- 3.25 The 2006 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS 2006), Singapore, December 4–7, 2006. Technical Program Co-Chair: Prof. Yong Lian. Tutorial Co-Chair : Prof. Tapio Saramäki.
- 3.26 The joint 44th IEEE Conference on Decision and Control and European Control Conference (CDC-ECC 2005), Seville, Spain, December 6-9, 2005. Program Committee Member: Prof. Wei Xing Zheng.
- 3.27 2005 International Workshop on VLSI Design and Video Technology (IWVDVT 2005), Suzhou, China, 2005. Technical Committee Member: Prof. Yong Lian.
- 3.28 International Conference on Biometrics Authentication (ICBA 2006) Hong Kong, 5-7 January 2006. Program Committee Member: Prof. Ioannis Pitas.

- 3.29 Second International Symposium on. Communications, Control and Signal Processing (ISCCSP 2006). Marrakech, Morocco, 13-15 March 2006. Technical Program Chair: Prof. Moncef Gabbouj.
  - 3.30 2006 IEEE International Symposium on Circuits and Systems (ISCAS 2006), Kos, Greece, May 2006. General Chair: Prof. T. Stouraitis.
  - 3.31 2006 IEEE International Conference on Biomedical Circuits and Systems (BioCAS 2006), London, UK, November 29-December 1, 2006. Technical Program Co-Chair: Prof. Yong Lian.
  - 3.32 2008 IEEE International Conference on Acoustics, Speech, and Signal Processing, (ICASSP 08), Las Vegas, NV, 2008. Organizing Committee Member: Prof. Lina Karam. Steering Committee Member: Prof. Lina Karam.
- 4 Books and Book Chapters:  
Nil
- 5 Short Courses:
- 5.1 Prof. Tapio Saramäki has served since 1995 the main lecturer and organizer of four intensive DSP courses to the industrial people through EDUTECH, the organization of Tampere University of Technology taking care of educating people outside the university.
- 6 Plenary Sessions, Keynote Speakers, Invited Lectures:
- 6.1 Dr. Paulo S. R. Diniz served as a Distinguished Lecturer of the IEEE Signal Processing Society during 2004. He was invited to give 12 talks around the world.
  - 6.2 Dr. Moncef Gabbouj serves as a Distinguished Lecturer of IEEE CAS for 2004-2005.
  - 6.3 Prof. J. B. Evans gave an invited talk entitled “The NeTS Program” at the NSF Wireless Networking PI Meeting, Charleston, South Carolina, USA, January 2004.
  - 6.4 Profs. Karen Egiazarian and Tapio Saramäki gave plenary talks at the 7th International Conference and Exhibition on Digital Signal Processing and its Applications (DSPA-2005), March 16–18, 2005, Moscow, Russia.
  - 6.5 Prof. J. B. Evans participated in an invited panel on NSF activities at the 2004 Conference on Information Sciences and Systems, Princeton, New Jersey, USA, March 18, 2004.
  - 6.6 Prof. J. B. Evans gave an invited talk entitled “Resilient Wireless Networks” at the IEEE Wireless Communications & Networking Conference, Atlanta, Georgia, USA, March 24, 2004.
  - 6.7 Prof. Moncef Gabbouj was invited to give a plenary speech at the 6th International Conference and Exhibition on Digital Signal Processing and its Applications (DSPA 2004), March 31–April 2, 2004, Moscow, Russia.
  - 6.8 Professor P. P. Vaidyanathan gave a plenary speech in ISCAS 2004, Vancouver, Canada on May 24, 2004. The title is “Genomic Signal Processing”.



- 6.9 Prof. Yong Lian serves as a Distinguished Lecturer of the IEEE Circuits and Systems Society. Prof. Yong Lian gave a Distinguished Lecturer talk in Shanghai, China, July 2004, Beijing, China, September 2004 and Singapore, Oct. 2004.
  - 6.10 Prof. H. K. Kwan served as a Panel Member of ISIMP2004 Forum on Future Research Directions of Digital Filters for Multimedia Signal Processing, October 2004.
  - 6.11 Prof. H. K. Kwan delivered a talk on “Digital Filters for Chaotic Signal Driven Parametric Modulation”, University of Hong Kong, October 2004.
  - 6.12 Prof. Ioannis Pitas serves as an invited speaker, 10th Panhellenic Conference on Informatics (PCI 2005), Volos, November 2005.
  - 6.13 Prof. I. Pitas gave an invited talk entitled “Elastic graph matching techniques in Biometrics”, COST275 Workshop on Biometrics, Vigo, Spain, 2004.
  - 6.14 Prof. Yuan-Pei Lin gave an invited talk of the 2004, Sixth DSP Educators Conference, Tokyo, Japan.
- 7 Editorial Services:
- 7.1 Prof. Tapio Saramäki serves as an Associate Editor, Circuits, Systems and Signal Processing.
  - 7.2 Prof. Yong Lian serves as an Associate Editor, IEEE Trans. on Circuits and Systems I. He serves as also a Guest Editor, IEEE Trans. on Circuits and Systems I.
  - 7.3 Prof. Yong Lian serves as an Associate Editor, Circuits, Systems and Signal Processing. He serves as also a Guest Editor, Circuits, Systems and Signal Processing.
  - 7.4 Prof. Zhiping Lin serves as an Editorial Board Member, Multidimensional Systems and Signal Processing.
  - 7.5 Prof. Zhiping Lin serves as an Associate Editor: Circuits, Systems and Signal Processing.
  - 7.6 Prof. Wu-Sheng Lu serves as an Associate Editor for IEEE Trans. on Circuits and Systems, I, starting from Jan. 2004.
  - 7.7 Prof. Truong Nguyen serves as an Associate Editor, IEEE Transactions on Image Processing.
  - 7.8 Prof. Truong Nguyen serves as an Associate Editor, IEEE Signal Processing Letters.
  - 7.9 Prof. Truong Nguyen serves as an Associate Editor, IEEE Transactions on CAS II.
  - 7.10 Prof. See-May Phoong serves as an Associate Editor, IEEE Trans. Circuits and Systems II.
  - 7.11 Prof. See-May Phoong serves as an Associate Editor, IEEE Signal Processing Letters.
  - 7.12 Prof. T. Stouraitis serves as a Regional Editor-Europe, Journal of Circuits, Systems, and Computers.
  - 7.13 Prof. T. Stouraitis serves as an Associate Editor, IEEE Transactions on VLSI.
  - 7.14 Prof. J. B. Evans serves as an Associate Editor, IEEE Communications Letters.
  - 7.15 Prof. Y. Miyanaga serves as an Associate Editor, Journal of Signal Processing, Japan.

- 7.16 Prof. Yuan-Pei Lin serves as an Associate Editor, IEEE Transaction on Signal Processing, 2002-2006.
  - 7.17 Prof. Yuan-Pei Lin serves as an Associate Editor, Multidimensional, Systems and Signal Processing, Academic Press, 1997-
  - 7.18 Prof. Yuan-Pei Lin serves as a member of Editorial Board, EURASIP Journal on Applied Signal Processing, 2004-2006.
  - 7.19 Prof. Wei Xing Zheng serves as an Associate Editor, IEEE Trans. on Circuits and Systems I.
  - 7.20 Prof. K. C. Ho serves as an Associate Editor, IEEE Transactions on Signal Processing.
  - 7.21 Prof. K. C. Ho serves as an Associate Editor, IEEE Signal Processing Letters.
  - 7.22 Prof. Ravi P. Ramachandran serves as an Associate Editor for the IEEE Circuits and Systems Magazine, the IEEE Transactions on Speech and Audio Processing and the journal Pattern Recognition.
  - 7.23 Prof. Wei Xing Zheng serves as an Associate Editor, IEEE Trans. on Automatic Control.
  - 7.24 Dr. Ravi P. Ramachandran serves as a Member of editorial board, IEEE CAS Magazine.
  - 7.25 Dr. Ravi P. Ramachandran serves as an Associate editor of IEEE Transactions on Speech and Audio Processing.
  - 7.26 Dr. Ravi P. Ramachandran serves as an Associate editor of Pattern Recognition.
  - 7.27 Prof. Håkan Johansson serves as an Associate Editor of IEEE Signal Processing Letters.
  - 7.28 Prof. Lina Karam serves as an Associate Editor of the IEEE Signal Processing Letters (2004-present).
  - 7.29 Prof. Sankar Basu serves as an Associate Editor, IEEE Trans. on Circuits and Systems II.
- 8 IEEE Services:
- 8.1 Prof. M. N. S. Swamy served as President-Elect of the IEEE CAS Society during 2003 and serves as now president for the year 2004.
  - 8.2 Prof. M. N. S. Swamy served on the Steering Committee for the IEEE Transactions on Multimedia.
  - 8.3 Prof. M. N. S. Swamy served on the Steering Committee for the IEEE Transactions on Mobile Computing.
  - 8.4 Prof. M. N. S. Swamy served on the Steering Committee for the Midwest Symposium on Circuits and Systems.
  - 8.5 Prof. H. K. Kwan served as the Past Chair (2004-2005) of Neural Systems and Applications Technical Committee.
  - 8.6 Prof. H. K. Kwan served as a Panel Member (2003-2004) of IEEE Circuits and Systems Society Outstanding Young Author Award.
  - 8.7 Prof. J. B. Evans serves as Chair, IEEE Communications Society Technical Committee on High-Speed Networking.
  - 8.8 Prof. J. B. Evans serves as the Secretary, Technical Activities Committee, IEEE Communications Society.

- 8.9 Prof. J. B. Evans serves as the Chair, Distinguished Lecturers Committee, IEEE Communications Society.
  - 8.10 Prof. Lina Karam serves as a member of the IEEE Signal Processing Society Conference Board.
  - 8.11 Prof. Lina Karam serves as a member of the IEEE Signal Processing Society's Image and Multidimensional Signal Processing (IMDSP).
  - 8.12 Prof. Lina Karam received the Outstanding Technical Contributions Award, IEEE Signal Processing and Communication Chapter, IEEE Phoenix Section, January 2005.
  - 8.13 Prof. Yong Lian serves as the Elected Chair of CAS Chapter, Singapore.
  - 8.14 Prof. Y. Miyanaga serves as Vice-Chair (2003- ) of International Steering Committee, IEEE International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS).
  - 8.15 Prof. Y. Miyanaga serves as International Steering Committee Member (since 2000- ) for IEEE International Symposium on Communications and Information Technologies (ISCIT).
- 9 DSP TC Technically Co-Sponsored Conferences/Symposia/Workshops:
- 9.1 "2004 First International Symposium on Control, Communications and Signal Processing (ISCCSP 2004), 21-24 March 2004, Hammamet, Tunisia".
  - 9.2 "The 47th IEEE International Midwest Symposium on Circuits and Systems (MWSCAS 2004), July 25-28, 2004, Hiroshima, Japan".
  - 9.3 "The 2004 International Workshop on Spectral Methods and Multirate Signal Processing (SMSP 2004) September 11-12, 2004, Vienna, Austria".
  - 9.4 "International Symposium on Communications and Information Technologies 2004, (ISCIT 2004), October 26-29, 2004, Sapporo Convention Center, Sapporo, Japan".
  - 9.5 "2004 IEEE International Workshop on Biomedical Circuits and System (BioCAS 2004), December 1-3, 2004, Marina Mandarin Hotel, Singapore".
  - 9.6 "2005 IEEE-EURASIP International Workshop on Nonlinear Signal and Image Processing, (NSIP2005), May 17-19, 2005, Sapporo Convention Center, Sapporo, Japan.
  - 9.7 "2005 IEEE International Symposium on Circuits and Systems (ISCAS 2005), Kobe International Convention Center, Kobe, Japan, May 23-26, 2005".
  - 9.8 "The 7th International Symposium on Signal, Circuits and Systems (ISSCS 2005), Iasi, Romania, July 14-15 2005".
  - 9.9 "2005 International Conference on Robotics, Vision, Information and Signal Processing (ROVISP 2005), Penang, Malaysia, July 20-22, 2005".
  - 9.10 "International Symposium on Communications and Information Technologies 2005 (ISCIT 2005), Beijing, China, October 12-14 2005".
  - 9.11 "International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS 2005), The Chinese University of Hong Kong, Hong Kong, Dec. 14-17, 2005".
  - 9.12 "Second International Symposium on Communications, Control and Signal Processing (ISCCSP 2006), Kenzi Farah Hotel, Marrakech, Morocco March 13-15, 2006". < <http://www.fsr.ac.ma/ISCCSP2006/> >

## 10 Other Activities:

- 10.1 Tampere International Center for Signal Processing (TICSP), Tampere University of Technology: The Center has acquired the status of Center of Excellence given by the Academy of Finland 2000-2005. The Director for TICSP serves as Prof. Jaakko Astola. Three of the DSP TC members, Profs. K. Egiazarian, M. Gabbouj, and T. Saramäki, are heavily involved in arranging the activities of TICSP. Profs. K. Egiazarian, M. Gabbouj, and T. Saramäki are the Team Leaders in SPAG (Signal Processing Algorithm Group). Several TC members (Profs. Pitas, Bellanger, Gabbouj and Nguyen) are members of the Advisory Board of TICSP. TICSP is an institute created to provide a proper environment for a rapid transfer of the latest ideas between first-class researchers in industry and academia. Its purpose is to provide a proper logistic, financial and human resource environment to adequately host exchanges of highly competent researchers. TICSP invites for periods of 2 to 12 months researchers at all levels: visiting professors, post-doctorate, and Ph.D. students, to engage research at the Signal Processing Laboratory in cooperation with the researchers of the neighbouring academic and industrial research institutes. The main purpose is to generate fruitful cooperation between scientists all around the world. Part of the activities of TICSP is organizing workshops. It has also its own publication series to appear twice a year. For more information, visit the homepage at URL: <http://sigwww.cs.tut.fi/TICSP/>.
- 10.2 Prof. Yong Lian continues (since 2003-04) to maintain our DSP TC web site at <http://www.ieee-cas.org/> which serves to promote the goal of the DSP TC.
- 10.3 Prof. Ioannis Pitas serves as the Greek National Council Member of Research and Technology.
- 10.4 Prof. Ioannis Pitas serves as a reviewer, Committee for Research Evaluation (CIVR), Italy.
- 10.5 Prof. Ioannis Pitas serves as a reviewer, the Centres of Excellence, KU Leuven, 2005

## 11 Some News from the TC Members are listed below:

- 11.1 Prof. Tapio Saramäki was awarded the Honorary Member (Fellow) of the Russian A. S Popov Society for Radio Engineering, Electronics, and Communications for great contributions to the development of digital signal processing theory and methods and great contributions to the consolidation of relationships between Russian and Finnish organizations. In <http://www.webstationone.com/fecha/popov.htm>, it has been mentioned: “(Russian scientist Alexander Stepanovitch) Popov definitely did become an inventor of radio, even if (Guglielmo) Marconi became known as the inventor of radio, but Popov hasn't been totally ignored in the history.” Saramäki became the 80<sup>th</sup> honorary member of the above-mentioned society since 1945.
- 11.2 Prof. Thanos Stouraitis directs the newly established International multidisciplinary Graduate Program on "Signal and Image Processing," based at the University of Patras, Greece.

- 11.3 Prof. Joseph B. Evans was appointed as a Program Manager in the Division of Computer and Network Systems, Directorate of Computer & Information Sciences and Engineering at the National Science Foundation, beginning in August 2003. He oversees a \$70 million portfolio of projects in networking systems, with a particular emphasis on wireless networks and network security.
- 11.4 Our DSP TC 2004 Annual Meeting is scheduled to take place on May 26, 2005 (Thursday), 12:45 pm to 2:15 pm at Portopia Hotel, Room Kitano, Kobe, Japan, during the 2005 IEEE International Symposium on Circuits and Systems, Kobe, Japan, May 23-26, 2005.

12 Acknowledgements:

The Chair (H. K. Kwan) would like to acknowledge all the DSP TC Members for their contributions in professional services; Prof. Yoshikazu Miyanaga, Secretary, for assisting the preparation of this annual report; Prof. Yong Lian for maintaining a professional DSP TC web site; and Prof. Tapio Saramaki for serving as the Past Chair.

Submitted by Prof. H. K. Kwan, DSP TC Chair.

Date: April 29, 2005.