Sensory Systems

Technical Committee of the IEEE Circuits and Systems Society

2008 Annual Meeting Minutes

ISCAS 2008
Date: Monday 19th May 2008
Time: 17:30 – 18:30
Room: Ballard
Hotel: Sheraton, Seattle
SSTC website: http://www.ewh.ieee.org/soc/icss/committees/sensors/sensors-tc.php

1. Approval of Agenda

The chair, Shih-Chii Liu, welcomed participants at the meeting. The agenda was moved by Tobi Delbruck for approval and seconded by Giacom Indiveri. The agenda was approved unanimously.

2. Introduction of members and officers of SSTC:

The chairman, Shih-Chii Liu, opened the meeting. She welcomed all TC members and visitors. 30 TC members including new TC members were present (of a total of 46 members, representing an attendance rate of about 65%). The attending members are listed in Appendix A.

3. New members

1. Dimitrios Loizes – high speed adaptive control, wireless EEG sensor systems.
2. Jacob Vogelstein – John Hopkins university, neural prosthetic systems for motor system rehab and control, CPGs, neural signal processing.
3. Zeljko Ignjatovic – Univ Rochester faculty, analog VLSI, ADCs, efficient systems based on holistic view of system.

All new members were voted in unanimously.

4. Annual report of 2008

Members who have not sent their information to the annual report should do so by the end of May. Tobi Delbruck will upload a dummy template to fill in or members can send any text or word file format. The annual minutes for 2007 were approved by members through email after the ISCAS 2007 meeting last year. The new minutes will be sent out for approval after ISCAS.

5. ISCAS 2008 SSTC activities.

The Sensory Systems Track received 58 submissions at ISCAS 2008. At least three reviews were arranged for each paper. With 6 Sensory System Sessions (4 oral, 2 posters), we had 5*6=30 accepted. Actually we had 31 accepted (one paper went into a

special session). The acceptance rate was 31/58=53%. This acceptance rate was slightly higher than the average acceptance rate of the conference. In addition, 3 special sessions proposals were accepted including the demonstration track session which has now been extended to include submissions from other technical tracks.

6. Best paper award for the Sensory Systems track ISCAS 2008

The chair Shih-Chii Liu, explained the procedure for selecting the best paper to the sensory track. The 11 best papers in the Sensors track (according to the reviews) were selected by the TC 2008 Sensory Systems track chair (Dr. van Schaik & Dr. Liu) based on the feedback on all papers from the reviewers and Review Committee Members. These 11 papers were then re-examined by the technical committee members, Drs. Liu, van Schaik, Linares-Barranco, Delbruck, Serrano-Gotarredona, and in addition, 4 other committee members , each examining 6 papers, so that each paper would receive 5 reviews. Examining of a (co-)author's paper by the author was avoided. Each examiner ranked the 6 papers assigned with the best ranked paper receiving 6 points and the lowest ranked paper 1 point. The paper's points were tallied and the highest scoring paper has been selected as the best Sensory Systems track paper for 2008.

The best paper went to "A sub-uW Fully Programmable CMOS DPS for Uncooled Infrared Fast Imaging" by Josep Maria Margarit, Lluis Teras, Francisco Serra-Graells, from the Institute of Microelectronica, Barcelona. No authors were at the SSTC meeting to accept the award.

The next ranked 2 papers were awarded honorary mentions.

The first honorary mention went to paper "A 64x64 Pixel Temporal Contrast Microbolometer Infrared Sensor" by Daniel Matolin, Christoph Posch, Rainer Wohlgenannt, Thomas Maier, from Austrian Research Centers, GmBH – ARCS. Christoph was on hand to accept awards.

The second Honorary Mention went to paper "Image Sensor with Focal Plane Change Event Driven Video Compression" by Yu M. Chi, Ralph Etienne-Cummings, Gert Cauwenberghs, from the University of California, San Diego and Johns Hopkins University. Ralph accepted the awards.

7. Discussion on Demonstration Track Activities

Tobi Delbruck reported on the statistics of the submissions to the Demo Track. 9/16 TC submitted demos to this track. This special session will become a regular special track at ISCAS 2009. No awards were presented for last year because the ISCAS committee had handed out prizes. Ralph suggested a paper form for visitors to rank the demos so that we can hand out prizes.
No prize was awarded this year due to lack of planning and coordination with CAS organizers. Philipp Haefliger suggested that a ranking was done at the meeting but it was concluded that this ranking should be best done during the demonstration events. Philipp will organize this event next year in conjunction with the ISCAS 2009 committee.

8. Report from Technical Activities committee meeting (Expert Now, DLP, TC membership, multi-conference meeting, BOG, web site material)

The chair, Shih-Chii Liu reported on items from the TC committee meeting.

1) Joos Vandervalle is soliciting candidates for Experts Now modules. These are educational courses by recognized experts and are offered by IEEE for purchase by companies and individuals. Temes and Moschytz were the speakers for the 2 modules in 2006 and Moschytz and Tamas were the speakers for 2007. New candidates are solicited. Recommendations are Eric Vittoz – low power circuits and Carver Mead.

2) The SSTC nominees to the DLP program in the last 2 years were both accepted. John Harris is the new DLP for 2008-2009. Please send possible nominees to Shih-Chii Liu.

3) TC membership: BOG would like that all TCs clean up membership. Shih-Chii remarked that SSTC membership is already pretty active because Andre van Schaik, the past chair, had already removed the inactive members. As part of the committee, SSTC members should be active in other ways, for example, by proposing sessions, tutorials at ISCAS.

4) CAS Multiconference Initiative. This is the second flagship conference for CAS society in the fall. The concept is that conference would bring together interdisciplinary topics which are represented by a couple of TCs. This year, the combined meetings are CNNA and IWCSN and NDES. In 2010, they would like to combine the multiconference meeting with LISSA, a work shop organized by NIH (life sciences).

Send suggestions of possible multiconference meetings by June 15 to Shih-Chii.

In addition, CAS would like to look into the possibility of organizing student design competitions to go with the multiconference meeting. Results will be presented at the meeting. Suggestions for design contests are solicited. Jennifer Blain Christen volunteers to suggest a contest for the multiconference meeting.

5) Solicitations for BOG candidates: SSTC has two members on BOG (Ralph and Bassen). Ralph states that a BOG member decides on issues like the next ISCAS location, and making sure that CAS runs smoothly. BOG meetings are about twice a year. If anyone has suggestions for BOG candidates they should organize support for their nomination themselves and then use the TC to solicit nominations from the members. This process is no longer through paper. Everything is done through the web.
If interested, contact **Georges Gielen** who is in charge of the IEEE CAS Board of Governors and Officers Election.

6) From BOG, TC website should not be static. Home page links to members will be included. Ideas for making the website more useful are solicited.

9. Discussion of ISCAS 2009 activities – special sessions, tutorials, etc

Deadline for special session proposals is 13 Sept. See http://www.iscas2009.org.

The chair was informed at the TC meeting that proposers for special sessions which were rejected can ask SS organizers for feedback. The primary focus of special sessions should be on emerging technologies and not on topics that would fit into the normal tracks. The ISCAS committee in 2009 will consider special session proposals which are closer linked to industry because of the strong presence of semiconductor industries in Taiwan.

Special session proposals should be endorsed by at least 1 TC.

Andrew Mason and Pam Abshire will look into organizing a special session on postprocessed CMOS sensors. Their SS focus will be on "technologies that make these things work."

Maysam Ghovanleo reported that the special session on biomedical interfacing circuits went well and will be proposed again next year in collaboration with a colleague at Case Western Univ.

Zeljko Ignjatovic suggested a special session on "efficient sensor design" using information theoretic measures.

Shih-Chii suggested that this topic or other SSs topic could also be absorbed into subtracks of the normal sensory track.

There was some discussion about what constitutes a special session.

Maysam suggested that special sessions should be distinguished by invited papers. Andrew Mason suggested that this distinction is not necessary because the papers are reviewed anyhow.

John Harris suggested that special sessions proposals should bring people to ISCAS who would normally not be there.

Tor Sverre Lande pointed out that special sessions could also be based on emerging technology topics, rather than being distinguished by presence of invited speakers who do not normally come to ISCAS.

Andrew pointed out that special sessions should represent "emerging technology" and Shih-Chii pointed out that special sessions should only last 1-2 years.

Ralph says special sessions should address a particular goal or question.

Shantanu suggests they should be topics outside traditional ISCAS areas.

Andrew Mason asks how much special session proposals should be linked to the theme of the ISCAS conference.

SSTC members should recruit new members who work on sensor network applications, partially because of the increase of submissions in this area to the Sensors Track. This creates a problem if we have no members in this area. Khaled suggested that CASCOM could pick up papers in this area.

10. AOB

Ralph solicited papers for BioCAS in November in Baltimore.
Orly reminded all that WiCAS will happen right after SSTC meeting and that there are a few passes left.

Meeting ended at 635pm.

Appendix A

30 Members present:
1. John Harris
2. Philipp Haefliger
3. Ralph Etienne-Cummings
4. Khaled Salama
5. Pamela Abshire
6. Eugenio Culurciello
7. Piotr Dudek
8. Viktor Gruev
9. Tor Sverre Lande
10. Tobi Delbruck
11. Andrew Mason
12. Orly Yadid-Pecht
13. Shih-Chii Liu
14. Bernabe Linares-Barranco
15. Denise Wilson
16. Giacomo Indiveri
17. Jonathan Tapson
18. Maysam Ghovanloo
19. Alexander Fish
20. Jennifer Blain Christen
21. Christoph Posch
22. Amine Bermak
23. Jacob Vogelstein
24. Milutin Stanacevic
25. Zelijko Ignjatovic
26. Denise Wilson
27. Shantanu Chakrabartty
28. Dimitri Loizos
29. Timothy Constandinou
30. Paul Hasler