Sensory Systems Technical Committee of the IEEE Circuits and Systems Society

2011 Annual Meeting Minutes

ISCAS 2011 Date: Monday 16th May 2011

Time: 17:30 – 18:30 Windsor Barra Hotel, Rio de Janeiro, Brazil

SSTC website: http://www.ewh.ieee.org/soc/icss/committees/sensors/sensors-tc.php

1. Approval of Agenda

The Chair, Bernabé Linares-Barranco, welcomed participants at the meeting. The agenda was approved unanimously.

2. Introduction of members

The meeting participants briefly introduced themselves. 25 people were present at the meeting including 21 TC members and 2 prospective members (of a total of 58 members) and 2 guests joined the meeting. The attending members, new members, and non members are listed in Appendix A.

3. New members

Andreas Andreou nominated Julio Georgiou, this was seconded by Tobi Delbruck; Giacomo Indiveri nominated Chiara Bartolozzi, this was seconded by Orly Yadid-Pecht. The nominees introduced themselves, and were accepted unanimously as new members of the committee.

4. Annual report of 2010-11

The Chair explained that the annual report on the 2010-11 committee activities is still under construction, contributions of member activities are welcomed to be included for the final version, these should be provided within 2 weeks; a template has been sent earlier. Approval of final version will be done by e-mail.

5. Best paper award for the Sensory Systems track ISCAS 2011

The new method for selecting best papers was explained. Nine best papers were selected, based on review scores. These were independently ranked by seven volunteers (each ranked all nine papers).

2nd Honorary Mention went to "A Hybrid Energy Scavenging Sensor for Long-Term Mechanical Strain Monitoring" by Chenling Huang and Shantanu Chakrabartty

1st Honorary Mention went to "Self-Quenching, Forward-Bias-Reset for Single Photon Avalanche Detectors in 1.8V, 0.18µm Process" by Changhyuk Lee and Alyosha Molnar

Best Paper went to "A 3-Pin 1V $115\mu W$ 176×144 Autonomous Active Pixel Image Sensor in $0.18\mu m$ CMOS" by Joseph Lin, Recep Ozgun, Philippe Pouliquen, Andreas Andreou, Charalambos Andreou and Julius Georgiou

The winners were applauded and those who were present received their certificates from the Chair. Photos were taken by Giacomo Indiveri.

6. Report from the Technical Activities Meeting.

- 6.1. The Chair presented a brief history of the SSTC, and some highlights from its contributions to ISCAS: the introduction of Demo Track (there was some confusion as to when the first demo session run, Philipp Häfliger clarified that it was in 2005), Best Paper Award in Sensory Systems track (since 2003), and the Confession Session this year (the initiative of Tobi Delbruck, which attracted 26 contributions from the SSTC members). The Chair reported that the chairs from other TC's were invited to advise their committees to contribute, or perhaps organize the Confession Session next year. Viktor Gruev mentioned the Analog TC may be interested in co-organising such session next year.
- 6.2. The Chair presented a summary of Sensory Systems track in ISCAS this year. The Track has received a total of 51 submissions. 26 papers were accepted (a 51% acceptance rate) and distributed in 4 oral sessions and 1 poster sessions. The second poster session was put forward by the track chair, but it was not accepted. Each paper received 3-6 reviews. 19 SSTC members acted as RCMs, each allocating 3-4 papers. The reviewer assignments were monitored by the chair, to ensure a good reviewer distribution.
- 6.3. Some of SSTC members have been involved in setting up a new journal: "Frontiers in Neuromorphic Engineering". Giacomo Indiveri briefly introduced the journal.
- 6.4. A DLP subcommittee has been established in the SSTC, consisting of the officers and past/present DLPs of the SSTC, with the purpose of reviewing and nominating DLP candidates from the members of SSTC. Three strong candidates were proposed last year, none was selected. The Chair suggested that it may be better to support just one candidate in the future. It is the first time that DLPs proposed by the SSTC were not accepted. No feedback has been received. It was noted that BioCAS TC has supported just one, but also not successfully. Two members of TC are currently DLP Ralf Etienne-Cummings (one year left) and Eugenio Curulciello (just become DLP, from Neural Systems TC).
- 6.5. SSTC website is down, as the re-structuring process within CAS is underway. It was discussed whether hosting of the webpage outside IEEE (e.g via Google) would be advantageous.

6.6. The Chair presented the current state of the "vision statement". Each TC has been requested to provide such document. The members were invited to provide feedback, opinions and contributions to this. Vojin Oklobdzija clarified that the purpose of the vision is to define the direction in which the field is going to move, the problems that we will be solving. David Skeller has pointed towards thinking in terms of 'Grand Challenges". The plan is that the vision statements will be refined across TCs by the vision committee, presented for comments, and ready to be presented at ISCAS in Korea.

7. Summary of 2010/11 Activities

These were already covered under point 6 of the agenda.

8. Various Messages

- 8.1 The Chair passed the message from Gert Cauwenberghs announcing the paper deadline for BioCAS conference, Andrew Mason clarified the deadline is on 17th June. This year BioCAS (San Diego 10-12 Nov 2011) will include a demo session, intended to encourage industry contributions. There will be a special issue of TBioCAS transactions including 9 selected papers.
- 8.2. The Chair announced that TBioCAS will publish a special issue from ISCAS. It was suggested that the SSTC proposes some papers to be selected. Ralph Etienne-Cummings reminded that these papers must have a clear biomedical focus. It was pointed out that the Guest Editors have been selected.
- 8.3 The Chair announced that at the TC Chairs meeting in the morning, Julia Chang spoke about the new initiative CAS FEST (Workshop on Future/Emerging Technologies). One of these workshops (on brain-machine interfacing) took place a day before ISCAS. Philipp explained the mechanism for proposing workshops, funding is available form CAS, deadline is 15th June. There is a journal (JETCAS) associated with the workshop. The workshop contributions should be journal-quality papers, and the intention is to have just one workshop per year. Proposal topics should be sent to Bassen and Julia. Andreas suggested that he, Julio and George Gielen were planning to organize a workshop on 3D integration, and invited people to email him regarding contributions.

9. Election of new officers

The Chair reminded the committee about the officers rotation procedure, as all officers are moving one step "up", there is vacancy for the Secretary-Elect. He invited volunteers and nominations. Viktor Gruev nominated Daniel Leon-Salas. He declined. Andrew nominated Timothy Constandinou. The nomination was seconded by Julio and supported by Andreas. He accepted the nomination, briefly outlined his interests (vision sensors, biomedical sensors, neural interfaces). Tobi Delbruck nominated Andrew. He declined. Tobi nominated Tara Hamilton. She declined. Tim was therefore the only candidate. He stepped out of the room to allow further discussion (strong support from members of SSTC) and a vote which was unanimous in favour. Therefore, Tim Constandinou was duly appointed a Secretary-Elect of the SSTC.

10. Chair pass over to new chair

Bernabe passed over chair to Tobi Delbruck. Teresa Serrano-Gotarredona becomes the Chair-Elect, Piotr Dudek becomes the Secretary. Tobi moved to thank Bernabe for his service and the SSTC members applauded.

11. AOB

There was no other business and the meeting concluded.

Appendix A

Members:

- 1. Pamela Abshire
- 2. Andreas Andreou
- 3. Shantanu Chakrabartty
- 4. Shoushun Chen
- 5. Marc Cohen
- 6. Steve Collins
- 7. Timothy Constandinou
- 8. Tobi Delbruck
- 9. Piotr Dudek
- 10. Ralph Etienne-Cummings
- 11. Viktor Gruev
- 12. Philipp Hafliger
- 13. Tara Hamilton
- 14. John Harris
- 15. Giacomo Indiveri
- 16. Walter Leon-Salas
- 17. Andrew Mason
- 18. Christoph Posch
- 19. Francisco Serra-Graells
- 20. Orly Yadid-Pecht
- 21. Akos Zarandy

New Members:

- 1. Julius Georgiou
- 2. Chiara Bartolozzi

Non Members present:

- 1. Vojin Oklobdzija, IEEE-CAS
- 2. David Skeller, IEEE-CAS