

Report MEETING Technical Committee on CAS Education and Outreach CASEO

Tuesday 17 May 2011 at ISCAS in Rio 12:10-13:15

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Agenda

0. Introduction of the participants of the meeting
1. Status of the CASEO TC
2. Report on the past activities in the period May 2009-May 2010
3. Webpage <http://homes.esat.kuleuven.be/~caseo/index.php>
4. Status and plans for further action points: short term/long term/adapt/responsible
5. Any other business

Report

0. Introduction of the participants of the meeting

1. Status of the CASEO TC

CASEO TC vision and short status report has been transmitted to the VP TA for the CAS TA Division meeting of Monday May 16, 2011 (copied here below)

VISION

- Student populations are less patient, requiring instant gratification.
- CAS-EE Visibility Paradox: Electricity is ubiquitous even to the very young, in a myriad of products and services. However, society takes these manifestations of engineering achievement for granted.
- In response to these observations it is the vision of the CASEO TC to motivate the public and the students by relating EE research and education to the many societal challenges of the coming decades (climate change, energy shortage, infrastructure, transportation, health care, needs of an aging population) and to design new didactic processes for new generations of students, and spread innovative didactical experiences.

SHORT REPORT

- TC started in 2008
- Webpage <http://homes.esat.kuleuven.be/~caseo/index.php>
- 18 registered members and growing interest
- CASEO TC meeting at ISCAS 2010 in Paris 19 participants with interesting discussion on current educational issues for CAS around the world
- 2 special sessions and a Track with one session at ISCAS2011
- Making plans for inventory, cooperation, actions, exchanging experiences...brainstorming

Joos Vandewalle (JV) was acting as founding chair for a two year term from May 2009-May 2011, and Tokunbo Ogunfunmi as secretary.

Elections for new chair and secretary were held.

Tokunbo Ogunfunmi (TO) and Babak Ayazifar were unanimously elected for a two year term from May 2011-May 2013, respectively as chair and as secretary. JV becomes past chair from May 2011-May 2013

JV will inform Heidi Zazza about the new officers of CASEO

Tokunbo Ogunfunmi and Babak Ayazifar will be track chairs for CASEO at ISCAS 2012.

JV will inform TPC chairs of ISCAS 2012 of the track chairs

2. Report on the past activities in the period May 2010-May 2011

a preliminary report of the past year's activities is being collected. All ISCAS CASEO

activities will be included and other relevant material provided by the CASEO members.

Additional input received by the end of May 2011 will be included. JV will send the report to IEEE CAS Society on June 15, 2011 and post it on the CASEO webpage.

3. Webpage

A webpage for the TC is set up. It can be reached from the CAS Webpage. It is maintained at the location of JV. The full address is <http://homes.esat.kuleuven.be/~caseo/index.php>. It is the ambition to bring value to it by collecting material related to the education issues. Also new members can sign up at the webpage. At present there are 18 registered members.

Actions:

Everybody is invited to contribute useful material by emails to JV.

Non members are invited to sign up.

The powerpoint presentations at ISCAS will be uploaded there.

The new logo of CASS will be posted on the webpage.

4. Status and further plans:

4.1 ISCAS 2012

Care should be taken to have good quality papers in the Track and not second class papers. The parameters to evaluate papers are discussed. Certainly the creativity and the innovation in the contribution should be considered, and the papers should satisfy minimal conditions of language, relevance, structure, attractiveness.

We can set up special sessions at ISCAS. These sessions should stress items like challenges, industry and training issues for professional engineers, curriculum structure, tools to train. Special sessions should be submitted to ISCAS special session chair by September 9, 2011 with an endorsement by the TC chair. It is important to mention that the special sessions should deal with emerging topics that are typically not appearing at ISCAS and will be selected on the basis of quality and on emerging capacity. It is recommended to have the special sessions endorsed by the TC Chairs. The papers (including the special session papers) will all be reviewed, and similar acceptance rates as this year are envisaged. Some TCs will be combined in one track. The Track structure is as follows

- 15.0 Education in Circuits and Systems
- 15.1 CAS Educational Methods and Instruction
- 15.2 CAS Educational Technology
- 15.3 CAS Educational and Professional Development Programs
- 15.4 CAS Ethics and Professional Conduct
- 15.5 Other Areas in CAS Education

ISCAS 2012 Deadlines

Deadline for submission of Tutorial Proposals: 9 September 2011

Deadline for submission of Special Session Proposals: 9 September 2011

Notification of acceptance of Special Sessions: 2 October 2011

Deadline for submission of Full 4-page Papers in Regular Sessions: 7 October 2011

Deadline for submission of Full 4-page Papers in Special Sessions: 28 October 2011

Action: Everybody is welcome to make initiatives for ISCAS2012 and contribute to it. Please send it to all those in the mailing list. Once the proposals have converged, the CASEO can endorse it and submit it to ISCAS2012.

Tokunbo will contact ISCAS chairs in order to have a plenary talk on challenges in education and suggest some speakers.

4.2 CAS Concepts inventory Develop concepts inventory in CAS. Such an inventory has already been set up in the Signal Processing Society, and Tokunbo Ogunfunmi has

experience with it and will coach this activity. Typically such an inventory describes the input and output and 6 months retention of the items in a course. A webpage collection of concepts inventories is maintained at Purdue <https://engineering.purdue.edu/SCI/workshop/tools.html>

ACTION- All those who want to contribute to the concepts inventory can reply to Tokunbo Ogunfunmi.

4.3 Contact with the IEEE Education society is maintained by Martin Di Frederico. He suggested also that PhD students that have made a substantial contribution to the CAS education be proposed for the CAS grant to attend ISCAS 2012. **Action Martin.**

4.4 It is encouraged to all members of the CASEO TC to contribute actively also to other CAS related conferences, like Midwest, APCAS, ECCTD, ..

4.5 Randy Geiger suggests the CASEO TC to work on a common model for curriculum for the basic CAS subjects in EE education. It should appeal to the students, and both deal with the content and the process. Interesting experience can be gathered from various initiatives at UC Berkeley, MIT, Columbia Univ. It is agreed that a subcommittee of about 10-15 persons will have a workshop in late Fall 2011. Financial support from CASS will be requested by June 15. Have already committed to contribute: Randy Geiger (chair), Babak, Eduard, Martin, Yun He, Tokunbo, Joos. Yannis Tsvidis will be requested to participate.

Action Randy Geiger

6. Any other business

No other items were addressed.