

## Minutes of Neural Systems and Applications Technical Committee

### 2012 Annual Meeting

Date: Monday, May 21st, 2012

Time: 12.10 pm to 1.10pm

Location: Room 317-B, COEX convention centre, Seoul, South Korea.

### 1) Introduction and welcome

The chair, John Harris, introduced the officers. Attendees at the meeting introduced themselves.

There were 14 participants present including 2 prospective new members.

The participants at the TC meeting were:

John Harris

Elisabetta Chicca

Alejandro Linares-Barranco

Christian Mayr

Christoph Posch

Piotr Dudek

Tobi Delbruck

Mounir Boukadoum

Majid Ahmadi

Yoko Uwate

Pamela Abshire

Jinhu Lu

Wei Xing Zheng

Shantanu Chakrabartty

### 2) Approval of Agenda

2012 NSATC meeting agenda is approved with no changes.

### 3) Approval of 2011 NSATC meeting minutes

2011 NSATC meeting minutes were shared with participants. Jinhu Lu and Wei Xing Zheng indicated that they attended to Rio meeting, but they were not on the list of participants. After this change, the minutes were approved.

### 4) Election of new NSA TCmembers

Two new members were voted into the TC. They are:

1. Christian Mayr, [christian.mayr@tu-dresden.de](mailto:christian.mayr@tu-dresden.de), Highly-Parallel VLSI-Systems and Neuromorphic Circuits, Technical University of Dresden, DE, <http://hpsn.et.tu-dresden.de/index.php?id=cmayr>

2. Mounir Boukadoum, [boukadoum.mounir@vgam.ca](mailto:boukadoum.mounir@vgam.ca), University of Quebec at Montreal, CA, [http://www.labunix.uqam.ca/~boukadoum\\_m/](http://www.labunix.uqam.ca/~boukadoum_m/)

### 5) ISCAS 2012 paper statistics

Chair John Harris commented the NSATC vision:

Artificial neural systems are mostly inspired by neurobiological computation using spike-based or rate-code models, or even higher levels of abstraction. The NSATC develops neural circuits and systems, paying particular attention to the tradeoff between computational power and efficient implementation. Application areas include brain-machine interfaces and functions performed

particularly well by the brain, including sensory/motor processing, learning, and cognitive systems. Implementations of novel architectures are studied using:

- Analog or hybrid analog/digital approaches for low power and low cost realizations
- Flexible digital architectures using custom ASICs or programmable FPGAs
- Novel nano-devices for realizing neural architectures with reduced power consumption and richer computation

Again this year, the NSA papers were merged with the CNN TC papers for a common Neural Systems and Networks at ISCAS. The chair informed that there were 43 paper submissions, with 46,5% acceptance rate equivalent to 20 papers organized as 3 oral sessions and 1 poster session. He commented that CNN had 5 paper submitted and all of them were accepted (100%) and this is a non-acceptable situation. Then Majid Ahmadi showed one of those paper and commented that it was related more to ADC than to Neural Networks and that Track chairs should be more careful with paper review and acceptance to avoid this kind of undesirable situations.

Chair then presented a comparison to 2011 submissions: In 2012 we have had 10 less paper submitted, from 4 lecture sessions and 2 poster sessions we have downgrade to 3 lecture and 1 poster sessions. To improve this situation he suggested and ask participants their opinion about merging our track with affinity ones, like Sensory Systems or BioCAS. After some discussion, we agreed to left our next chair Jinhua Lu to deal this. Jinhua Lu also suggested improving our submissions by sending emails when the deadline is approaching and he will do that next year.

Several participants agree with the idea that our Distinguished Lecturer is supposed to visit centers and promote our track to improve submissions.

It also arise the comment that our track has many other conferences per year that make researchers to redistribute their production, like ICECS (this year in Seville, SPAIN), BioCAS, MidWest, NewCAS, NIPs, being many of them cheaper than ISCAS.

At this point of the meeting Vojin G. Oklobdzija, IEEE Circuits and Systems Vice President for Technical Activities, interrupts the meeting and asked the chair to borrow 5 minutes to share some comments. The most important were:

- All the CAS tracks have to improve the industry and commercial participants. An industrial committee will be organized.
- A Vision committee has initiated a merging strategy of tracks. NSATC can be fused with Cellular Nano-Scale Networks track.

Vojin finalized his intervention and NSATC meeting continued.

## **6) Annual report**

Chair John Harris left the track secretary to comment this point. Alejandro commented that he has received 14 individual reports from John Harris a couple of days before this meeting. The report will be finalized one or two weeks after the meeting, so he invited to those people that haven't submitted their individual report to do it within the following week in order to be included in the 2011 annual report.

## **7) Report from TC committee meeting (meeting was moved to Wednesday)**

Chair John Harris commented at this point that the report from TC committee is not available yet because this meeting has been moved to Wed 23th may. Secretary elect Shantanu will go to that meeting and include the report to these meeting minutes.

Minutes:

- 1. Meeting called to order at 5:00 pm, May 23rd, 2012.*

2. *The discussions included rethinking about the current organization of the TCs within CAS. This included aligning existing CAS publications with the CAS vision.*
3. *The committee discussed the relevance of CAS to industry and ways to boost industry participation for ISCAS. The current industrial participation in ISCAS is only 8% which is very low compared to other premier conferences like ISSCC.*
4. *It was discussed that every TC work on their vision statement. This statement should be a paragraph (not a page) and should emphasize future areas of research.*
5. *The committee discussed issues related with review and merging of different TCs.*
6. *It was noted that every TC should nominate two representative to the anti-plagiarism initiative currently being put forth and policed by the IEEE.*
7. *It was urged that every TC institute some measures to monitor the quality of their members. The measures could include citations, level of activity etc. It was argued that membership to a TC be only allowed after the member has shown some demonstrable track record or service. For instance, new assistant professors might not be granted TC membership right away.*
8. *Meeting was adjourned at 6:00 pm.*

#### **8) Best paper/presentation award for NSATC 2012**

NSATC officers agreed to attend to NSA oral sessions and evaluate paper / presentations in order to elaborate a ranking and decide the best paper/presentation and one honorary mention.

#### **9) Discussion of new activities**

In order to attract new industrial and research people to NSA track, John Harris proposes that new chair Jinhu Lu organize a special session for next ISCAS (Beijing 2013) with a composition of 2 important presenters from China/Asia and other 3 from Europe/USA/Australia.

Tobi Delbruck nominated Shantanu to be DLP. No objection arised.

#### **10) Election of officers for 2012-2013 term**

Tobi Delbruck nominated Elisabetta Chicca to be next secretary elect. Elisabetta left the room for the vote and she was accepted unanimously.

Jinhu Lu succeeded John Harris as Chairman of NSA TC.

Alejandro Linares succeeded Jinhu Lu as Chair-Elect of NSA TC.

Shantanu Chakrabartty succeeded Alejandro Linares as Secretary of NSA TC.

Elisabetta Chicca was nominated as candidate for the Secretary-Elect position and was elected.

John Harris became Past-Chair of NSA-TC.

#### **11) Plagiarism Committee Elections**

From Vojin G. Oklobdzija, Vice President, Technical Activities, IEEE CAS Society:

“Please elect 2 members: preference on senior, long time members, to serve on CAS Plagiarism Committee. We have been confronted with the increasing number of plagiarism cases, which we must handle efficiently and timely. We are forming a Plagiarism Committee and we would like to have experts form each Technical Activity, preferably ones with the long term memory and the ones that have been members of CAS and active readers for number of years.”

After some discussions, *Prof. Wei Xing and Prof. Majid Ahmadi* are nominated for Plagiarism committee of CAS society.

**10) Any other business**

Prof. Majid Ahmadi remembered that ICECS deadline is next July 15<sup>th</sup>. The conference will be held in Seville, SPAIN in December 9-12.

**The meeting was adjourned at 1:20pm.**