

CIRCUITS AND SYSTEMS SOCIETY Cellular Neural Networks and Array Computing Technical Committee



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Minutes of the CNNAC Technical Committee Annual General Meeting

7 May 2000 6:00pm Blackwattle 1, Parkroyal Hotel at Darling Harbour ISCAS 2001, Sydney

Attendance:

G. Barrows, L. Fortuna, M. Gilli, A. Hodges, M. Laiho, D. Liu, G. Moschytz, R. Newcomb, J. Nossek, M. Ogorzalek, C. Rekeczky, A. Rizzo, T. Roska, G. Setti, B. Sheu, B. Shi, R. Tetzlaff, V. Tavsanoglu, A. Ushida, C. Y Wu

Report from Chairman

T. Roska welcomed all members to the annual meeting and reviewed the 2001 annual report of the technical committee.

He reported that there are now six startup companies seeking to commercialize CNN technology: Anafocus (Seville), Analogic Computers (Budapest), Digital Mosaic (Boston), CECIL (Gothenberg, Sweden), Videnda (Denver), TeraOps, Inc, (Berkeley). He suggested that a listing of these companies be added to the current website, along with links to company websites where available. (Action: R. Tetzlaff)

Young Researcher's Contest

T. Roska reminded the committee of the commitment by the Circuits and Systems Technical Activities Board to support the cost of prizes associated with the Young Researcher's Contest. The next contest will be held in conjunction with CNNA 2002, to be held in Frankfurt in July 2002. P. Arena, M. Gilli and C. Rekeczky will form the organizing committee for this contest. C. Rekeczky will be the committee chair. (Action: P. Arena, M. Gilli and C. Rekeczky)

Membership

- R. Newcomb suggested that the 30 member limit should be increased to infinity, as the limit discouraged the participation by younger members in the technical committee. He proposed a motion to delete the last sentence of paragraph 1 of the membership section, which set the maximum number of members. J. Nossek raised the concern that there might be a limit on the number of members in a technical committee imposed by the Circuits and Systems Society or the IEEE Bylaws. However, M. Ogorzalek stated that the current bylaws were adopted from an old version of the bylaws used by the Nonlinear Circuits and Systems Technical Committee and that the current bylaws used by that committee no longer set a maximum on the number of members.
- B. Shi suggested that since the associate membership grade was created to broaden participation in the technical committee, if the limit on the number of members in the technical committee was now deleted, it made sense to delete the associate membership grade and make all current associate members (G. Barrows, M. Ogorzalek and C. Y. Wu) regular members. Therefore, he proposed that the committee also delete the entire second paragraph of the membership section of the bylaws.

The complete proposal to delete the limit and the associate membership grade and to elect all associate members as regular members was adopted unanimously by the committee. In addition, six new members were elected unanimously to membership: A. Hodges, M. Laiho, D. Liu, C. Rekeczky, A. Rizzo and G. Setti. The current membership list is attached here as Appendix A.

CNNA 2002

- R. Tetzlaff reported that CNNA 2002 was scheduled to be held July 22 to 24, 2002 at the Johann Wolfgang Goethe-Universität in Frankfurt, Germany. He has extended invitations to J. Hamori, M. Zaghloul, W. Porod, A. Csurgay and W. Singer to give plenary talks. F. Werblin will also be invited. The paper submission and review process will be done electronically. The paper submission deadline is January 21, 2002.
- R. Tetzlaff distributed a preliminary version of the call for papers. T. Roska suggested to add "Integrated sensing and processing" to the list of topics of interest. He also suggested to switch the order of topics 6 and 7, with topic 6 to be renamed "Analogic CNN microprocessors and chipsets" and topic 7 to be renamed "Development systems, software implementations and simulators." L.F. suggest to add a topic of interest called "Complexity and analog computation" or something along those lines. R. Tetzlaff agreed to take these suggestions into account in revising the call for papers. All members were asked to distribute the final call for papers when it is ready and publicize the conference. (Action: R. Tetzlaff, all members)
- L. Fortuna inquired whether university housing would be available to foreign students to lower the costs associated with attending the conference and thus encourage more student participation. R. Tetzlaff replied that such housing would be available. T. Roska suggested that a short course for students on CNN technology be organized just before or in parallel with the conference. R. Tetzlaff will look into organizing such a course. (Action: R. Tetzlaff)

With regard to publicity and organizational support, it was suggested that advertisements should be placed in the Circuits and Systems Magazine. In addition, the IEEE Technical Activities Board should be notified so that they can include in their list of conferences. L. Fortuna suggested to contact T. Davis for Region 8 support. (Action: R. Tetzlaff)

ECCTD 2001

M. Laiho conveyed apologies from V. Porra for not being able to attend the meeting. He reported that this year's European Conference on Circuit Theory and Design (ECCTD) to be held in Helsinki in August 2001 will include a large amount of coverage of CNNAC topics: one track, plenary talks, special sessions, as well as the design automation day.) Given the high level of CNNAC activity at ECCTD, V. Porra suggests to hold another technical committee meeting there. T. Roska supported the idea. Any members wishing to raise agenda items or topics for discussion at this meeting are encouraged to contact L. Fortuna, who takes over as chair of the technical committee after ISCAS 2001. (Action: All members)

ECCTD 2003

M. Ogorzalek reported that he will be organizing ECCTD 2003 in Krakow, Poland. It will be held Sept 1-4 2003. Technical activities would be similar to those held in Stresa (1999) and Helsinki. A formal call for papers will be issued in Helsinki at ECCTD 2001.

Website

R. Tetzlaff stated that he felt that it was important that website reflect the interests of the entire technical committee. Thus, in keeping the website updated, it is important to have updated input from the technical committee members, as well as others working in CNN and Array Computing. All members are encouraged to report interesting activities and advances to R. Tetzlaff for publishing on website. At the very least, links to personal webpages of the technical committee members need to be up-to-date. All members were asked to send the address of their personal home pages to R. Tetzlaff within one month (by 7 June). (Action: All members)

Given the changes in membership and bylaws, B. Shi agreed to send updated bylaws and a new membership list for publication. He would also send the minutes from the meetings and the annual reports of the activities to be made available via the website. (Action: B. Shi)

T. Roska suggested to add a new section on Books and Courses to augment the educational component of the website. Through this section, students and researchers interested in CNN and Array Computing Technology would be able to find out what institutions are offering CNN and Array Computing related courses, as well as information about available textbooks. (Action. R. Tetzlaff)

LF suggested that a section on patents also be included in the website. (Action: R. Tetzlaff)

Relationship with Sensors and MicroElectroMechanical Systems (MEMS) Technical Committee.

- T. Roska reminded the committee that cooperation between the CNNAC and the Sensors and MEMS technical committees was originally established when the Sensors committee was under the leadership of M. Zaghloul. He was happy to report that this cooperation is continuing with the Sensors committee under the leadership of G. Barrows, and invited G. Barrows to say a few words.
- G. Barrows reported that the technical program committee track for the Neural Systems and Applications, the CNNAC and the Sensors and MEMS tracks collaborated during the organization of the technical program so that members from the three communities would have as much opportunity to visit each others sessions. He also reported on the current activities of the Sensors and MEMS technical committee.

Comments from Incoming Chairman

L. Fortuna started by thanking the technical committee for their support and confidence in electing him to lead the technical committee for the next two years.

He went on to say that research into CNN and Array Computing is synergetic and therefore requires a multitude of skills. Thus, it is important to educate students as early as possible. He encouraged faculty at universities involved in CNNAC research to establish formal agreements to allow exchange of students, noting that this often enables government support for these exchanges.

He also recounted G. Setti's proposal to the Nonlinear Circuits and Systems Technical Committee to publish an archive of the most important publications in Nonlinear Circuits and Systems from the last 5-6 years. This will be a good way to convey to the technical community an overview of the breadth and depth of work in that field. He suggested that the CNNAC technical committee consider a similar work archiving important works in CNNAC research. (**Action: L. Fortuna and T. Roska** will prepare a proposal for the IEEE Press)

He noted that at this year's ISCAS there were 2 special sessions, 3 regular sessions and 1 poster session (in collaboration with the Sensors and MEMS track) covering CNNAC research. This was a good achievement by technical committee and the track organizers.

He informed the committee that L. Chua will be a visiting professor at the University of Catania between from next May to next August (2002). The university is proud to host Prof. Chua and will try to organize CNNAC related activities during his visit.

In closing, L. Fortuna formally thanked T. Roska on behalf of the entire committee for his efforts in establishing the committee and leading it through its initial years. In turn, T. Roska thanked L. Fortuna for his efforts in taking over the committee and B. Shi for his service as secretary.

AOB

There being no other business, the meeting adjourned at 8:15pm.

Appendix A: Membership List

Name	Affiliation	Country
Andreou, Andreas	Johns Hopkins University	USA
Arena, Paolo	University of Catania	Italy
Cauwenberghs, Gert	Johns Hopkins University	USÁ
Chua, Leon	University of California at Berkeley	USA
Chung Yu Wu	National Chiao Tung University	Taiwan
Civalleri, Pier Paolo	Politecnico di Torino	Italy
Csurgay, Arpad	Technical University of Budapest	Hungary
Espejo, Servando	University of Sevilla	Spain
Fortuna, Luigi	University of Catania	Italy
Geoffrey Barrows	Centeye Corporation	USA
Gilli, Marco	Politecnico di Torino	Italy
Hodge, Angela	University of Maryland	USA
Ismail, Mohamed	Ohio State University	USA
Laiho, Mika	Helsinki University of Technology	Finland
Lau, Clifford	Office of Naval Research	USA
Liu, Derong	University of Chicago	USA
Liu, Ruey-wen	University of Notre Dame	USA
Maciej Ogorzalek	University of Mining and Metallurgy	Poland
Moschytz, George	ETH Zurich	Switzerland
Newcomb, Robert	University of Maryland	USA
Nossek, Josef	Technical University of Munich	Germany
Porra, Veikko	Helsinki University of Technology	Finland
Rekeczky, Csaba	Hungarian Academy of Sciences	Hungary
Rizzo, Alessandro	University of Catania	Italy
Rodriguez-Vazquez, Angel	University of Sevilla	Spain
Roska, Tamas	Hungarian Academy of Sciences	Hungary
Salam, Fathi	Michigan State University	USA
Setti, Gianluca	University of Ferrara	Italy
Sheu, Bing	Nassda Corporation	USA
Shi, Bertram	Hong Kong University of Science and Technology	Hong Kong
Spaanenburg, Ben	University of Gronigen	Netherlands
Szolgay, Peter	Hungarian Academy of Sciences	Hungary
Szu, Harold	Office of Naval Research	USA
Tanaka, Mamoru	Sophia University	Japan
Tavsanoglu, Vedat	South Bank University	United Kingdom
Tetzlaff, Ronald	University of Frankfurt	Germany
Ushida, Akio	Tokushima University	Japan
Vandewalle, Joos	K. U. Leuven	Belgium
Zarandy, Akos	Hungarian Academy of Sciences	Hungary