



IFIP Working Group 10.5 Minutes Meeting

March 03, 2021

Virtual meeting

Notes taken by Graziano Pravadelli

Attendees: Graziano Pravadelli, Manfred Glesner, Victor Grimblatt, Ricardo Reis, Fatih Ugurdag, Donatella Sciuto, Luc Claesen, Maciej Ogorzalek, Chi Ying Tsui, Matteo Sonza Reorda, Nicola Bombieri, Tiziana Margaria, Andrea Calimera, Ahmed Jerraya, Dominique Borrione, Salvador Mir, Abe Elfadel, Srinivas Katkoori, Ian O'Connor, Eugenio Villar, Juergen Becker, Luis Miguel Silveira, Odysseas Koufopavlou, Leandro Soares Indrusiak

Apologies: Masahiro Fujita, Michael Huebner

Invited: Anupam Chattopadhyay, Sara Vinco, Katell Morin-Allory, Elena-Ioana Vatajelu, Yuanqing Cheng, Saraju Mohanty

Agenda

1. Communications
2. New member candidatures
3. WG vice chairs
4. Mapping of WG competences
5. VLSI-SOC status
6. IFIP awards
7. WG workshops
8. Organization of an FDL 21 special session
9. Any other business

1. Communication

Graziano reports the following information from Prof. Achim Rettberg (IFIP TC 10 chair):

- From September 2021 to September 2022 is the IFIP year to celebrate 60 years of IFIP;
- On Spring 2021 there will be a meeting among chairs of WGs belonging to TC 10;
- On September 2021 there will be the IFIP General Assembly in Paris

2. New member candidatures

We have 5 new candidatures (Prof. Yuanqing Cheng, Prof. Saraju Mohanty, Prof. Sara Vinco, Prof. Katell Morin-Allory, Dr. Elena-Ioana Vatajelu).

The candidatures of Prof. Yuanqing Cheng and Prof. Saraju Mohanty were already approved in 2020 by emails, but they did not have the opportunity to introduce themselves to the working group.

The five candidates then present their research activities which focus in particular on the following topics:

- **Yuanqing Cheng** (Beihang University, Beijing, China): CAD for emerging technologies, Low power, energy efficient and reliable design for emerging memories, Thermal aware design, Design for 2.5D & 3D integration circuits;
- **Sara Vinco** (Politecnico di Torino, Italy): Heterogeneous systems modeling and simulation, Design space exploration, Homogeneous simulation framework for virtual prototyping;
- **Katell Morin-Allory** (Grenoble INP / Université Grenoble Alpes, France): Formalization, Verification, Assertion mining, HW design of temporal assertions, in the context of multi-clock and asynchronous circuits, and heterogeneous systems;
- **Elena-Ioana Vatajelu** (CNRS / Université Grenoble Alpes, France): Security primitives, Neuromorphic computing, Test and reliability, In-memory computing;
- **Saraju Mohanty** (University of North Texas, USA): Security and energy-aware IoT, IoT solutions for smart healthcare, Consumer electronics for smart cities.

In addition, Prof. Vinco says she is interested in promoting the WG to young people, Prof. Morin-Allory says she is interested in organizing small workshops and sub-groups on specific topics, and Dr. Vatajelu says she is available for supporting in conference organization.

After the presentations, we unanimously approved the admission of all the candidates to the working group.

3. WG vice chairs

Graziano proposed the following people for the WG vice chair roles. The proposal is intended to cover different geographical areas, expertise, and roles.

Name	Geographical area	Main expertise	Promotional role
Tiziana Margaria	Europe	Formal methods	Women enrolment
Ibrahim Elfadel	Africa, Asia and Far East	Cyber physical systems and IoT	Mentoring for VLSI-SOC organizers
Ricardo Reis	America	Physical design and testing	Networking with IFIP initiatives
Victor Grimblatt	Worldwide	EDA, electronic industry	Industrial liaison

Vice chairs introduce themselves concerning their specific role.

The members of the working group thank Tiziana, Ibrahim, Ricardo and Victor for their availability and wish them good work.

4. Mapping of WG competences

Graziano proposes to map the competences of WG members in order to:

- increase the interaction among the members for the definition and the development of research projects and teaching initiatives,
- promote the visibility of the group towards the scientific and industrial communities.

In particular, the mapping of competences will be useful, for example, for:

- being more attractive to industries with a web page per each area;
- identifying new members, according to the missing competences w.r.t. to the group mission and vision;
- mapping competences w.r.t. the work programme of the international funding calls to promote the creation of consortiums for applications;
- identifying possibility of cooperation among the institutions of WG members, including PhD students exchange, visiting professors;
- organizing summer schools.

The idea is to map members competencies within the scope of the WG 10.5 according to a standard taxonomy.

The WG members approve the idea and discuss about the implementation of the mapping and the selection of the keywords.

Suggestions come from different members:

- Tiziana proposes to consider both the core technologies and the application fields in a sort of matrix;
- Abe proposes to start with the granularity already listed in the WG 10.5 web site to move then towards a finer granularity;
- Salvador proposes to start with the categories used for classifying the VLSI-SOC tracks.

Ideally the mapping should be ready for the next WG meeting.

5. VLSI-SOC status

VLSI-SOC 2021

Andrea presents the status of VLSI-SOC 21 by using the website of the conference (www.vlsi-soc.com).

- The conference will run virtually in the period October 4-8.
- The organizing committee has been finalized.
- Key dates are:
 - Abstract: April 19
 - Final pdf: April 26
 - Special session proposal: April 26
 - Notification: June 21
 - Camera ready: July 12
 - PhD Forum submission: June 4
 - PhD Forum notification: June 28
 - PhD Forum camera ready: July 22
- Publicity has been started
- Submission will be open in the second half of March
- Registration site will be open in mid of July

Victor summarizes info concerning the program:

- 8 tracks have been defined and the related TPC composition is almost final. The tracks are:

- AMS, sensors and RF
- VLSI circuits and SoC design
- Embedded system design and software
- CAD tools and methodologies for digital IC design and optimization
- Verification, modelling and prototyping
- Design for testability, reliability and fault tolerance
- Hardware security
- Emerging technologies and new computing paradigms
- 3 industrial keynotes and 3 academic keynotes are foreseen respectively on
 - Neuromorphic by IMEC
 - Security on the edge by Intel
 - DNN on the edge by Apple
 - DNN acceleration for edge by Vivienne Sze (MIT)
 - Neuromorphic by Damien Querlioz (CNRS)
 - Secure AI by Ruby Lee (Princeton)

Abe asks concerning the possibility of running the conference hybrid. Andrea responds the conference will run virtually due to Covid-19 restrictions. Authors will be asked to pre-record their presentations. Q&A per each paper will be live.

Riccardo suggests putting info in the web site to describe how the conference will run.

Andrea says they have not defined yet how to manage the PhD forum.

Ioana proposes to use gather town (<https://gather.town>). It is possible putting posters, chatting, video conferencing, etc.

Andrea says no poster session is foreseen. Only short or long presentations.

A long discussion follows about the possibility of having papers published on a special issue of a journal instead of Springer Book.

- Graziano informs that Achim (TC10 chair) is going to explore the possibility of moving from the book to the journal by preserving the royalties for IFIP to support students from emerging countries.
- Ricardo remembers that publishing the book is at zero cost for the conference.
- Ricardo says moving to a journal for best papers and having the book for the proceedings could be a possibility, but in that case we have cost for distributing the book to the participants.
- Ricardo says probably there is no Springer journal that perfectly fits VLSI-SOC topics.
- Andrea remembers that MDPI offers a sponsorship for the creation of a special issue. This should be discussed during the VLSI-SOC steering committee meeting.
- Graziano says there are conferences (like ESWEEK) that publish the proceeding in a journal. We could have the same.
- Finally, the discussion about moving from book to journal is postponed to next meeting.

Manfred remembers to put the VLSI-SOC logo on the top of the web page.

Riccardo suggests putting we are celebrating “40 years from the first edition” in the web page.

VLSI-SOC 2022

Odysseas summarises the status of VLSI-SOC 2022 in Patras.

- Dates: October 3-7 2022
- Location: Cultural centre of the University of Patras
- How to reach Patras: by air to Athen and then by train or Bus (209 Km), by boat (from Italy)

- Accommodations: many hotels near the university. Negotiation for special rate is on going
- Excursions: Olympia place, Delphi,
- Theme of the conference: VLSI-SoCs in 5G Era”
- Sponsors: IFIP, IEEE CEDA, ACM Sigda, IEEE CAS, University of Patras, Synopsys, MDPI
- Organizing committee: to be completed.

Luc proposes to change 5G with 6G in the theme.

VLSI-SOC 2023

Said Hamdioui contacted some universities in Morocco. They are interested but only if COVID free.

6. WG workshops

Francois Anceau workshop to be organized.

Ricardo (chair), Victor, Michael, Manfred, Ahmed, Salvador are in the committee.

Salvador is in contact with Francois daughter.

Ricardo proposes to organize it in May 2021.

Manfred proposes some person to be invited

7. Organization of an FDL 21 special session

Sara is the special session chair for FDL 2021.

Tiziana, Victor and Eugenio offer to be the main contact persons for organizing the special session.

8. IFIP awards

Graziano remembers the different kind of awards and the nomination procedure.

An award committee is established. Members: Luis Miguel (chair), Dominique, Manfred, Luc and Srinivas.

The committee has the role of identifying the list of persons to be nominated and following the nomination procedure.

Ricardo should be nominated for IFIP fellow.

Salvador and Manfred should be nominated for Silver Core.

9. Any other business

- Webinar of the WG are pending.
- Ricardo suggest to submit paper to the IFIP conference on IoT in Amsterdam (virtual this year). Only a few papers submitted from our WG in the past. Ricardo will share the CFP.
- Ricardo remembers that IEEE is giving 50% discount for student memberships.

Next meeting: Summer 2021, to be defined.