

Women in circuits and systems (WiCAS) and young professionals (YP) at ICECS 2020.

DI CAPUA, G., PAYVAND, M., COVI, E. and FOUGH, N.

2021

© 2021 IEEE. Personal use of this material is permitted. Permission from IEEE must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works.

Women in Circuits and Systems (WiCAS) and Young Professionals (YP) at ICECS 2020

A "Women in Circuits and Systems" (WiCAS) event and a "Young Professionals" (YP) event took place during the 27th IEEE International Conference on Electronics Circuits and Systems (ICECS), the flagship conference for the Region 8 of the IEEE Circuits and Systems Society (CASS).

The WiCAS events traditionally aim to inspire and motivate both students and young professionals in the domain of circuits and systems to have efficient roles in their professions, by meeting successful female engineers and professors, through interesting technical and professional talks in fields of interest of CASS. The YP events usually include start-ups presentation, poster and demo sessions, aiming to provide a thrilling environment for early career researchers to present their work. Joining this event, young professionals have the opportunity to learn about state of the art and most advanced activities in the area of circuits and systems, meet and interact with their peers, receive feedback from internationally well-known experts in the CASS domain from both academia and industry.

The ICECS 2020 WiCAS event was held on November 24th, 2020, organized by Dr. Erika Covi (NaMLab, Germany), Dr. Giulia Di Capua (University of Salerno, Italy), and Dr. Melika Payvand (ETHZ, Switzerland).

The WiCAS event included a panel discussion, driven by the theme "Inspiring stories of women's success in STEM". The event involved the participation of four recognized speakers, both from academia and industry: Prof. Teresa Serrano-Gotarredona (National Micro-electronics Institute, Seville, Spain), Dr. Angeliki Pantazi (Research Manager at IBM, Zurich, Switzerland), Dr. Chiara Bartolozzi (Italian Institute of Technology, Genoa, Italy), and Dr. Elham Ebrahimi (Comms Technical Lead at Spire, Edinburgh, United Kingdom). As women in leadership positions with proven excellent record of accomplishment in fields of interest of the IEEE CASS, the WiCAS panelists shared precious experiences and advices with the conference attendees.

The speakers not only shared their personal journey and the path to their success, but also their research interest. Their research and experience spanned from analog/mixed-signal design and neuromorphic engineering, all the way to emerging technologies and even space applications. The panel discussion was a lively session on the impact of gender gap and cognitive biases in women's career.

The ICECS 2020 YP event was held on November 25th, 2020, organized by Dr. Nazila Fough (Robert Gordon University, United Kingdom) and Dr. Giulia Di Capua (University of Salerno, Italy).

The YP event included welcoming talks about IEEE, IEEE YP and IEEE CAS, generously provided by Dr. Mona Ghassemian (IEEE UK & Ireland section chair), Dr. Vinko Lešić (IEEE YP Region 8 chair), Prof. Izzet Kale (IEEE UK & Ireland vice-chair and CAS Chapter-chair) and Prof. Tony Davies (IEEE R8 History Activities coordinator). A discussion session on how to get research works successfully published was also organized, thanks to the amazing contributions of Dr. Hakim Meskine (Advance Electronics Materials Editor in Chief, Wiley) and Dr. Charles Glaser (Springer Nature Editorial Director). After these talks, a YP demo session and a YP poster session took place.

The YP track was open to students, new lecturers and early career researchers, who had the opportunity to present their research work, stay technically up-to-date and learn about future challenges in CASS domain.

During the conference, awards were assigned for the best contributions presented in the WiCAS and YP competitions. All WiCAS and YP winners were announced during the ICECS 2020 awarding ceremony.

Twenty-seven papers were accepted for the WiCAS competition, and three awards were assigned. A "1st Runner-Up Paper Award" was assigned to Dr. Saman Fatima, a Doctoral Researcher at the University of Paris Saclay (France), for the paper titled "A CMOS Readout Circuit for a Low Shunt Resistance IR photo-Detector."

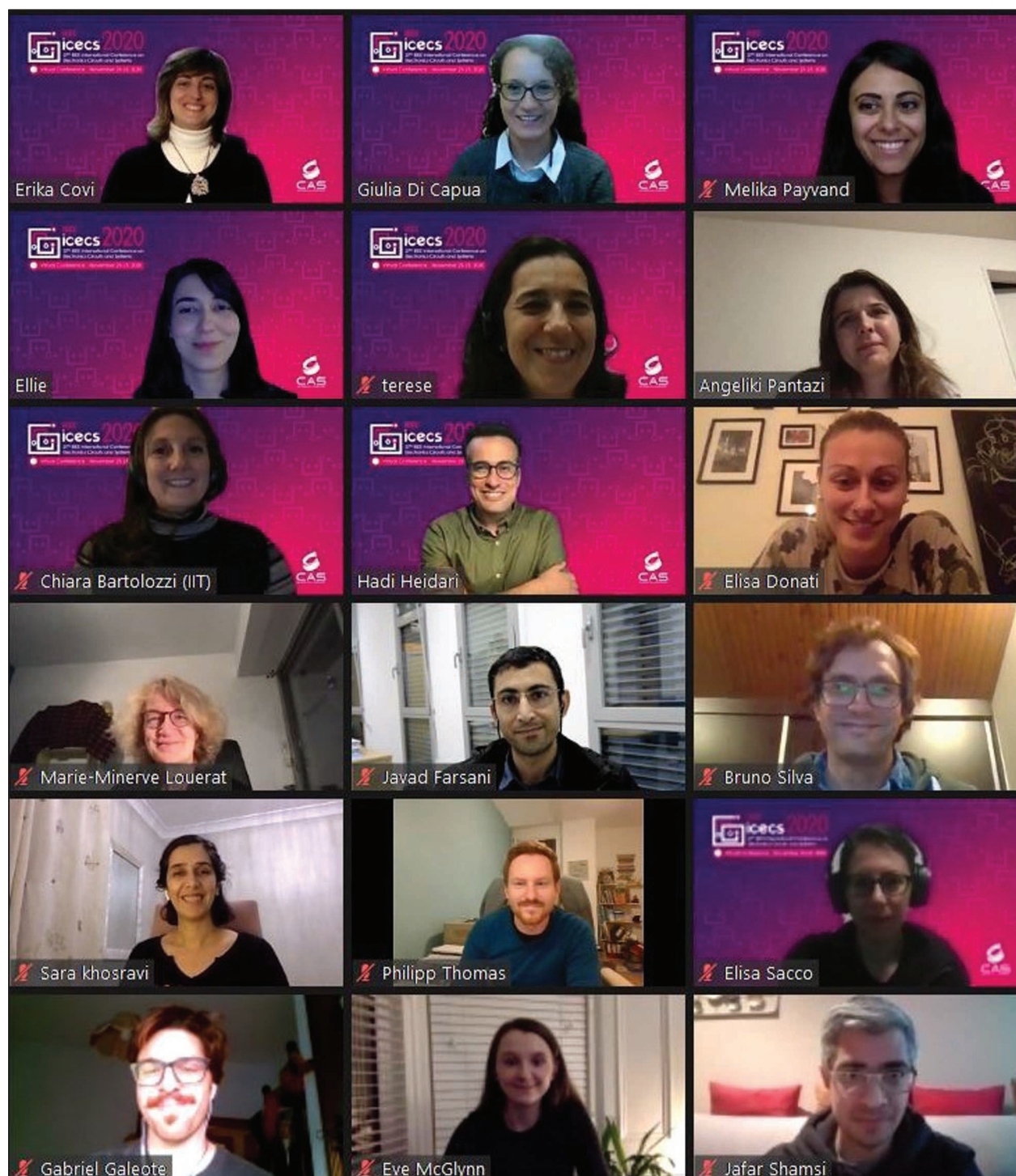


Figure 1. Some attendees of the WICAS session.



Figure 2. Some attendees of the YP session.

A “2nd Runner-Up Paper Award” was assigned to Ms. Eve McGlynn, a PhD Student at the University of Glasgow (United Kingdom), for the paper titled “Encapsulated Magnetoelectric Composites for Wirelessly Powered Brain Implantable Devices.” A “Best Paper Award” was eventually assigned to Dr. Fanny Spagnolo, a Postdoctor-al Researcher at the University of Calabria (Italy), for the paper titled “A High-Performance and Power-Efficient SIMD Convolution Engine for FPGAs.”

Twelve papers and four demo presentations were accepted for the YP competition, and three YP awards

were eventually assigned. A “Best Demo Award” was assigned to Dr. Jason Eshraghian, a Post-Doctoral Fellow at the University of Michigan (U.S.A.), for the live demonstration titled “Prosthesis Control Using a Real-Time Retina Cell Network Simulator.” A “Best Presentation Award” was assigned to Ms. Elena-Diana Șandru, a PhD student at the University Polytechnic of Bucharest (Romania), for the poster titled “Machine Learning-Based Local Sensitivity Analysis of Integrated Circuits to Process Variations.” Finally, a “Best Paper Award” was assigned to Mr. Kosuke Uchiyama, a PhD student at the Nagoya University (Japan), for the poster titled “Design

of Fully-Integrated Self-Powered FM Transmitter Using On-Chip Photodiodes in 65-nm CMOS.”

The WiCAS and YP winners received a one-year IEEE plus IEEE CASS membership, thanks to the generous support provided by the IEEE CASS. Moreover, as a sign of appreciation to all 2020 WiCAS and YP participants, the WiCAS co-chairs and the YP co-Chairs were pleased to grant a 25 USD voucher for CAS-related technical books to all speakers who gave live presentations during the conference days.

The WiCAS and YP co-chairs express their gratitude to

the ICECS 2020 general co-chairs, Prof. Hadi Heidari and Prof. Elena Blockina, and to the conference organizing committee, for the technical support received in the definition of the WiCAS and YP sessions. The WiCAS and YP co-chairs would also like to thank the IEEE Circuits and Systems Society for the financial support that helped making these events a great moment of professional and personal enrichment.

Many thanks to Giulia Di Capua, Melika Payvand, Erika Covi and Nazila Fough who contributed to this report.