

VLSI-SoC 2022: Ph.D Forum

October 3-5, 2022
University of Patras
Patras, Greece



VLSI-SoC 2022 is the 30th in a series of international conferences sponsored by the International Federation for Information Processing Technical Committee 10 Working Group 5, IEEE CEDA, and IEEE CASS, which explore the state-of-the-art in the areas of Very Large Scale Integration (VLSI) and System-on-Chip (SoC) design. The purpose of VLSI-SoC is to provide a forum to exchange ideas and showcase academic as well as industrial research in architectures, circuits, devices, design automation, verification, test, and security, within digital, analog, and mixed-signal systems.

VLSI-SoC 2022 will be held under the theme "SoCs for 5G Evolution and 6G," exploring the design and optimization challenges around 5G+6G communication systems and devices embedded systems, security, low power circuits, powered by CMOS and beyond CMOS-technologies.

While the event is expected to be in presence, its format will be decided at a later date depending on the COVID-19 pandemic evolution.



Eligibility for Ph.D. Forum: The author must have completed at least one year of a Ph.D. program. Past Ph.D. scholars who have defended their thesis in or after June 2021 are also encouraged to submit.

Presentation: Posters will be introduced in the Ph.D. Forum Session (two-minute time slot, one slide) and next will be presented in a full one-hour Poster Session.

Publication: Accepted posters will be given two pages in the proceedings.

Grants for PhD students: VLSI-SoC 2022 will provide a limited number of travel grants through the Technical Committee TC-10 (Computer Systems Technology) and WG-10.5 of the International Federation for Information Processing – IFIP. Grants are intended to support students from emerging and underdeveloped countries (by UN classification), who cannot be fully supported by their institutions.

How to Apply: Submit a two-page extended abstract of your research work in PDF format. Send submissions via EASYCHAIR platform of VLSI-SoC 2022.

Paper Format: Papers should be compliant with the guidelines for regular

Topics of interest include, but are not limited to:

- ▶ Analog mixed-signal, sensors, and RF
- ▶ VLSI circuits and SoC design
- ▶ Embedded systems design and software
- ▶ EDA tools and methodologies for digital IC design
- ▶ Verification, modeling and prototyping
- ▶ Design for testability, reliability and fault-tolerance
- ▶ Hardware security
- ▶ Emerging technologies and new computing paradigms
- ▶ AI acceleration
- ▶ Approximate Computing
- ▶ Circuits for quantum computing
- ▶ Cryogenic processors



- General co-chairs:** Odysseas Koufopavlou (University of Patras, GR), Graziano Pravadelli (University of Verona, IT)
- Program co-chairs:** Vassilis Paliouras (University of Patras, GR), Lech Jozwiak (Eindhoven University of Technology, NL)
- Special session co-chairs:** Dimitrios Soudris (National Technical University of Athens, GR), Apostolis Fournaris (Monash University, AU)
- Ph.D. & Student forum co-chairs:** Ricardo Reis (Universidade Federal do Rio Grande do Sul, BR), Alexandra Zimpeck (UCPel, BR)
- Industrial chair:** Victor Grimblatt (Synopsys, CL)
- Local chair:** Nicolas Sklavos (University of Patras, GR)
- Publication chair:** Paris Kitsos (University of Peloponnese, GR)
- Publicity co-chairs:** Yuanqing Cheng (Beihang University, CN), Claudio Diniz (UFRGS, BR), Matthew Guthaus (UC Santa Cruz, USA), Athanasios Kakarountas (University of Thessaly, GR), Salvador Mir (TIMA, FR), Thanos Stouraitis (Khalifa University, UAE), George Theodoridis (University of Patras, GR)
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