# **Call for Contributions**

Submission: 1. Inform the Chairs: with the Title of your Contribution 2. Submission URL: <u>https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=VALID+2019+Special</u> Please select Track Preference as FMSAV

Special track

# **FMSAV:** Formal Methods for Software Analysis and Verification

## **Chairs and Coordinators**

Chair: PhD Student Samuele Buro, Department of Computer Science, University of Verona, Italy samuele.buro@univr.it

Co-Chairs: PhD Student Marco Campion, Department of Computer Science, University of Verona, Italy <u>marco.campion@univr.it</u>

Co-Chair: Postdoctoral Researcher Michele Pasqua, Department of Computer Science, University of Verona, Italy

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along with

VALID 2019, The Eleventh International Conference on Advances in System Testing and Validation Lifecycle November 24, 2019 to November 28, 2019 - Valencia, Spain <u>https://www.iaria.org/conferences2019/VALID19.html</u>

In recent years, software-based systems have experienced a continuous growth in dimensions, complexity, and significance in a very wide range of fields and applications. Unsurprisingly, this central role of software systems has gone hand in hand with an increase of critical errors and failures that in the worst scenario may lead to data leakage, security holes, and system violation.

In this context, formal methods have been the de facto tool for ensuring the correctness of software with respect to a set of specifications. They enable the validation of complex systems in an automated (or, semi-automated) way reducing manual efforts. Nevertheless, a low percentage of software is proved correct by the use of formal techniques.

The main goal of these formal methods for the validation of software-based systems. Research contributions can report new results and evidences on the scalability of existing tools to large code base of software, development of new methodologies for program analysis and verification, application of formal methods to new research areas, and industrial tools for proving system correctness.

## Topics include, but not limited to:

- Abstract interpretation
- Deductive system
- Model checking
- Program analysis
- Program certification
- Program optimization
- Program synthesis

- Program verification
- Programs and languages specification
- Programming languages and semantics
- Run-time monitoring
- Security of software for cyber-physical systems
- Type systems

### **Important Datelines**

Inform the Chair (see Contacts below): as soon as you decide to contribute Submission: Sep 18, 2019 Notification: Oct 17, 2019 Registration: Oct 27, 2019 Camera-ready: Oct 27, 2019

### **Contribution Types**

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

### **Paper Format**

- See: <u>http://www.iaria.org/format.html</u>
- Before submission, please check and comply with the editorial rules: <u>http://www.iaria.org/editorialrules.html</u>

## **Publications**

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: <u>http://www.thinkmind.org</u>

#### **Paper Submission**

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=VALID+2019+Special Please select Track Preference as FMSAV

## Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at http://www.iaria.org/registration.html

#### Contacts

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