

# ICSEA 2019

## Forward

The Fourteenth International Conference on Software Engineering Advances (ICSEA 2019), held on November 24 - 28, 2019- Valencia, Spain, continued a series of events covering a broad spectrum of software-related topics.

The conference covered fundamentals on designing, implementing, testing, validating and maintaining various kinds of software. The tracks treated the topics from theory to practice, in terms of methodologies, design, implementation, testing, use cases, tools, and lessons learnt. The conference topics covered classical and advanced methodologies, open source, agile software, as well as software deployment and software economics and education.

The conference had the following tracks:

- Advances in fundamentals for software development
- Advanced mechanisms for software development
- Advanced design tools for developing software
- Software engineering for service computing (SOA and Cloud)
- Advanced facilities for accessing software
- Software performance
- Software security, privacy, safeness
- Advances in software testing
- Specialized software advanced applications
- Web Accessibility
- Open source software
- Agile and Lean approaches in software engineering
- Software deployment and maintenance
- Software engineering techniques, metrics, and formalisms
- Software economics, adoption, and education
- Business technology
- Improving productivity in research on software engineering
- Trends and achievements

Similar to the previous edition, this event continued to be very competitive in its selection process and very well perceived by the international software engineering community. As such, it is attracting excellent contributions and active participation from all over the world. We were very pleased to receive a large amount of top quality contributions.

We take here the opportunity to warmly thank all the members of the ICSEA 2019 technical program committee as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and efforts to contribute to the ICSEA 2019. We truly believe that thanks to all these efforts, the final conference program consists of top quality contributions.

This event could also not have been a reality without the support of many individuals, organizations and sponsors. We also gratefully thank the members of the ICSEA 2019 organizing committee for their help in handling the logistics and for their work that is making this professional meeting a success.

We hope the ICSEA 2019 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in software engineering research. We also hope Valencia provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

#### **ICSEA 2019 Steering Committee**

Herwig Mannaert, University of Antwerp, Belgium  
Mira Kajko-Mattsson, Royal Institute of Technology, Sweden  
Luigi Lavazza, Università dell'Insubria - Varese, Italy  
Roy Oberhauser, Aalen University, Germany  
Elena Troubitsyna, Abo Akademi University, Finland  
Radek Koci, Brno University of Technology, Czech Republic  
Stephen W. Clyde, Utah State University, USA  
Sébastien Salva, University Clermont Auvergne (UCA), Limos, France  
Christian Kop, Universitaet Klagenfurt, Austria  
Luis Fernandez-Sanz, Universidad de Alcala, Spain  
Bidyut Gupta, Southern Illinois University, USA

#### **ICSEA 2019 Industry/Research Advisory Committee**

J. Paul Gibson, Telecom Sud Paris, France  
Adriana Martin, National University of Austral Patagonia (UNPA), Argentina  
Muthu Ramachandran, Leeds Beckett University, UK  
Michael Gebhart, iteratec GmbH, Germany

#### **ICSEA 2019 Publicity Chair**

Ayman Aljarbouh, University of Grenoble Alpes (UGA) in Grenoble, France