

# Preface

The Colombian Conference on Computing is an annual gathering organized by the Colombian Computer Society ([www.sco2.org](http://www.sco2.org)). It aims to promote and strengthen the Colombian community in computer science, bringing together researchers, students and practitioners, both national and international. The contributions were received in English and Spanish. Contributions written and accepted in English as full papers are published in this volume of the Communications in Computer and Information Science (CCIS) series of Springer.

The Colombian Computer Society first organized this conference in 2005 in Cali, and successive events have been held in Bogotá (2007), Medellín (2008), Bucaramanga (2010), Manizales (2011), Medellín (2012), Armenia (2013), Pereira (2014), Bogotá (2015) and Popayán (2016).

The 12th Colombian Conference on Computing (12CCC) was held in Cali again, the city of its birth, from September 19 to 22, 2017. The conference was attended by national and international researchers. This year the conference was organized by the Colombian Computer Society, the Universidad Autónoma de Occidente and the Universidad de San Buenaventura. This conference was an opportunity to discuss and exchange ideas about computing (techniques, methodologies, tools, among others) with a multidisciplinary approach, strengthening the synergies between researchers, professionals and companies related to the topics of interest of the conference.

The conference covers the following areas:

- Information and knowledge management
- Software engineering and IT architectures
- Educational informatics
- Intelligent systems and robotics
- Human-Computer Interaction
- Distributed systems and large-scale architectures
- Image processing, computer vision and multimedia
- Security of information
- Formal methods, computational logic and theory of computation

The conference allowed the presentation of research papers with (i) a significant contribution to knowledge or (ii) innovative experiences in the different areas of computing. This conference included plenary lectures, discussion forums, tutorials and a symposium for master's and doctoral students.

All paper submissions were reviewed by three experts. Authors removed personal details, the acknowledgements section and any references that may disclose the authors' identity. Papers not satisfying these conditions were rejected without reviews. All contributions were written following the Springer template and the first anonymous version was submitted in PDF format.

The conference received 186 submissions, of which 56 were accepted as full papers, 12 were accepted as full papers in Spanish, 12 were accepted as short papers in Spanish and 11 were accepted as short papers in English. Reviewing was performed by national and international reviewers. Moreover, the EasyChair system was used for the management and review of submissions.

We are grateful to all authors, especially the ones who presented their papers at the conference, and to the 12CCC conference organizers and Springer.

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