

# Latin America Regional Special Section



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# Welcome

**W**ELCOME TO THE special section on Latin America, covering all the Spanish- and Portuguese-speaking countries from Rio Grande to Cape Horn. Latin America is a striving region, with many countries aiming at a developed status in the near future, while at the same time facing enormous challenges in inequality, education, and government. The region also supports a great wealth of biodiversity. With generally less resources for research and a more difficult path for technology transfer when compared to developed countries, we aimed at highlighting the excellent level of research in computer science that flourishes in the region, both on basic research and on problems that are unique to Latin America.

We launched a general call for contributions welcoming research and development initiatives, large and small, aiming to cover as much as possible the diversity in development along the different countries. While countries like Argentina, Brazil, Chile, Mexico, and Uruguay exhibit, at different scales, promising environments for the development and advance of computing research, our survey also uncovered countries like Colombia, Costa Rica, or Peru, with a lot of potential that is waiting for stronger government or industry support in order to develop at large.

After a virtual workshop where an initial selection of the proposals was presented, we finally narrowed down the content to six “Big Trends” and eight “Hot Topics” contributions, with authors from Argentina, Brazil, Chile, Colombia, Mexico, Peru, and Uruguay. We commissioned a journalist to complete the section by preparing a panoramic view of computer science in Central America and the Caribbean, with particular emphasis in Costa Rica. We thank all the colleagues that worked hard to present their research lines. While we had to leave out various interesting proposals, we believe the selection we present gives a good grasp of the landscape of computer science in Latin America, without being exhaustive.

The Big Trends articles cover the work of large research groups and/or labs with significant funding, on well-developed topics in the region like theoretical computer science, data management, supercomputing, dependable computing, digital health, and image processing. The Hot Topics articles describe initiatives of smaller groups, ranging from general research areas like natural language processing, smart cities, machine learning, data structures, and randomness services, to very special lines of research like estimating carbon stocks in Amazonia, characterizing Salsa music, or developing a system to fight the Coronavirus in one week.

We are confident readers will find the articles very exciting! We hope this section contributes to disseminate the wealth of activity in computer science research in a region where working on research is more difficult in many aspects, yet it still manages to stand out as a significant actor in the most important research areas of our discipline.

—*Virgilio Almeida, Gonzalo Navarro, and Sergio Rajsbaum*  
**Coordinators of Latin America Region Special Section**

**Virgilio Almeida** (virgilio@dcc.ufmg.br) is professor emeritus of computer science at the Universidade Federal de Minas Gerais, Brazil. He is also Faculty Associate at the Berkman Klein Center at Harvard University, Cambridge, MA, USA.

**Gonzalo Navarro** (gnavarro@dcc.uchile.cl) is a professor in the Department of Computer Science at the University of Chile, in Santiago.

**Sergio Rajsbaum** (sergio.ajsbaum@im.unam.mx) is a professor at the Instituto de Matemáticas at the Universidad Nacional Autónoma de México, in Mexico City, México.

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