



CibSE 2026

XXIX Congreso Iberoamericano en Ingeniería de Software
XXIX Congresso Ibero-Americano de Engenharia de Software
XXIX Ibero-American Conference on Software Engineering
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Preface

On behalf of the CibSE 2026 Organizing Committee, we are pleased to present the proceedings of the 29th Ibero-American Conference on Software Engineering (CibSE 2026). First held in 1998, CibSE has consolidated its role as a distinguished forum for the dissemination of cutting-edge research and best practices in Software Engineering. This year, the conference was hosted by the Universidad Nacional Pedro Henríquez Ureña (UNPHU) in Santo Domingo, Dominican Republic, which constituted an ideal context for the successful organization of this high-quality event.

As software systems increasingly underpin essential aspects of modern society (e.g., communication, finance, healthcare, and transportation), the need for rigorous engineering approaches becomes ever more critical. The development of such systems demands the systematic application of well-defined methods, processes, and tools across the entire lifecycle to ensure their reliability, efficiency, and overall quality. In this evolving landscape, Software Engineering plays a central role in addressing the growing complexity, scale, and societal impact of software-based solutions. This relevance is further reinforced by the rapid emergence of transformative technological paradigms, such as quantum computing and the Internet of Things (IoT), which introduce new requirements and challenges for the design and operation of software systems. In particular, the increasing integration of Artificial Intelligence (AI) and, more recently, Generative AI, is reshaping the way software is conceived, developed, and maintained. These advances demand novel engineering approaches capable of ensuring transparency, trustworthiness, and adaptability in next-generation systems.

Against this backdrop, CibSE has emerged as the principal forum for Software Engineering research in Ibero-America. The conference serves as a key venue for the dissemination of high-quality scientific contributions and the exchange of innovative ideas. It actively supports its community by enabling researchers to present and discuss their work, while also fostering collaboration and knowledge transfer among academia, industry, and students. Through these activities, CibSE contributes to advancing discipline and strengthening the connections between research and practice.

For this edition of CibSE, a total of 64 submissions were received (57 full papers and 7 emerging ideas papers). After three desk rejections, 61 submissions (54 full papers and 7 emerging ideas) underwent the full review process. After careful peer-reviewing by the members of the Program Committee, 21 full papers and 2 emerging ideas papers were accepted, resulting in an acceptance rate of 38.9% for full papers and 28.5% for emerging ideas papers. Five distinguished papers were invited to submit extended versions to the *Science of Computer Programming* journal, and the best paper received an award certificate. In addition to the 23 research papers, 10 posters were accepted, providing a forum to share and discuss early-stage research and enriching the CibSE technical program. Also, 10 papers were accepted in the Applied R&D projects and contracts category, presenting ongoing research, collaboration experiences and technology transfer with industry and organizations. Finally, 6 papers were accepted in the Journal First category, providing authors the opportunity to discuss their previously published work to the CibSE community and further broaden the scope of the technical program.

CibSE 2026 hosted a new edition of the Doctoral Symposium, aimed at disseminating ongoing research conducted by early-career researchers. In this forum, a panel of experts engaged in discussions with 7 doctoral students, offering valuable feedback and new perspectives and suggestions to enhance their doctoral work. The research presented by the students covered several topics aligned with CibSE 2026's scope, including foundations, techniques, tools, and applications of Software Engineering. The symposium was further enriched by a keynote presentation delivered by Prof. Xavier Franch (Universitat Politècnica de Catalunya, Spain), titled *"This crazy little thing called PhD"*.

This year's edition also hosted the 9th edition of the Ibero-American School on Software Engineering (EibAIS), which aims to provide a forum for discussing both foundational and emerging technology topics in Software Engineering. EibAIS welcomes participation from practitioners, undergraduate and graduate students, and researchers alike. For CibSE 2026, three tutorials were offered, each addressing timely and relevant topics in the field of Software Engineering:

- Landing in Quantum Computing: From Theory to Practice (José A. Cruz-Lemus, Universidad de Castilla la Mancha, Spain).
- Designing health systems: availability, privacy, and uncertainty (Hernán Astudillo and Carla Taramasco, Universidad Andrés Bello, Chile).
- LLM Agent Development (Juan Pavón, Universidad Complutense de Madrid, Spain).

Another highlight of CibSE 2026 was the Industry Talks Track, which brought professionals from private companies to share their experience with the CibSE audience. In particular, Huáscar Tejeda and Rilke Petrosky from Pentraze Cybersecurity delivered the talk *From Humans to Agents: Continuous Software Security in the Era of Autonomous Systems*; José Manuel Fernández Núñez from ClusterSoft discussed *Software Engineering as a Social Validation System: From Code to Reality Construction*; and Kevin Bueno Santiago from Huawei presented *Beyond Servers: Software Development in the Cloud Era*.

The conference also featured three distinguished keynote presentations, each addressing prominent and timely topics in Software Engineering:

- *Turning Complexity into Clarity: How Storytelling Dashboards Transform Decision-Making*. Maribel Yasmina Santos (University of Minho, Portugal)
- *Profiting from the randomness of LLMs in the Requirements Engineering Process*. Julio Leite. (Federal University of Bahia, Brazil).
- *The illusion of code: why the future of software is not just programming but deciding*. Federico Muller (Microsoft Country Manager in the Dominican Republic).

Finally, we would like to express our sincere gratitude to all those who contributed to making this event possible. The high quality of the technical program is the result of the commitment and hard work of the Program Committee members and additional reviewers. We are also deeply thankful to the Organizing Committee, authors, keynote speakers, panelists, tutorial instructors, session chairs, sponsors, and all participants for their valuable contributions to the success of CibSE 2026. We also extend our appreciation to the chairs of the previous edition for sharing their expertise and advice with us.

We are grateful to the CibSE Steering Committee for their continued support, with special thanks to Marcela Genero for her guidance throughout the process. We also extend our deepest appreciation to Óscar Pastor and Héctor Santillán, our General Chairs, whose exceptional dedication and coordination were key to the successful organization of the conference. Last but not least, we would like to express our sincere appreciation to José Reyes, who played a key role in bringing together two closely connected communities (Spain and the Dominican Republic) whose relationship reflects that of brother nations, united by a shared heritage while preserving their distinctive identities.

It has been a privilege and a pleasure to serve as Program Chairs for CibSE 2026, and we are deeply thankful for the opportunity.

Pedro Valderas and Regina Braga
CibSE 2026 Program Chairs

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