RCIS 2025: Joint Proceedings of Workshops and Research Projects Track

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Preface

The 19th International Conference on Research Challenges in Information Science (RCIS 2025) took place from the 20th to the 23rd of May 2025. The conference was held as a live, in-person event in Seville, Spain. Seville is a historic Andalusian city in southern Spain, known for its rich culture, iconic architecture, and role in Spanish history.

RCIS aims to bring together scientists, researchers, engineers, and practitioners from a wide range of Information Science fields and to provide opportunities for knowledge sharing and dissemination. The special theme of RCIS 2025 was "Advancing Information Science and Information Systems Quality in the Era of Complexity". As technology and data continue to evolve at an unprecedented pace, the complexity of systems increases, making the assurance of high-quality more complex and crucial than ever. The emphasis on quality is essential not only for meeting the increasing expectations of end-users but also for addressing the growing challenges of security threats and compliance requirements.

The workshops were held on May 20th, and the Research Projects Track took place on the 22nd. Two workshops were accepted based on their quality and potential to attract participants. The workshops aimed to promote the exchange, cross-fertilization, and dissemination of new ideas among the members of the RCIS community, both researchers and practitioners. In addition, the workshops kept in mind the special theme of the conference. The workshops of RCIS 2025 were the following:

- **3rd International Workshop on Cyber-Physical Social Systems for Sustainability: Shaping Tomorrow** (CPSS4Sus2025), organized by Isabel Sofia Brito, Ivan Machado, and João Paulo Barros. According to NIST, Cyber-Physical Systems (CPS) will bring advances in personalized health care, emergency response, traffic flow management, electric power generation and delivery, and in many other areas now just being envisioned. Therefore, such systems' economic and social potential is huge, and large

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investments are being made worldwide to develop these systems. The world is confronting numerous challenges that should be dealt with shortly, such as tackling climate change and environmental degradation, producing affordable and clean energy, eliminating poverty, and ensuring education, health, and social protection for all. CPS can be relevant in addressing social, environmental, economic, and governance sustainability. Regarding social sustainability, it is imperative to identify early development approaches for CPS systems that promote strong and fair communities, such as social and health equity, community development, human rights, and social justice. These human and social characteristics and interactions are brought into the CPS due to the human-centric computation shift to the Cyber-Physical Social System (CPSS), which is the target of our workshop. The workshop aims to provide a forum for researchers and practitioners i) to discuss their current work focusing on requirements, design, and empirical studies about emerging opportunities and challenges of CPSS for sustainability, ii) to define a research agenda on the topic of CPSS for sustainability.

- **The 18th Workshop on Social and Human Aspects of Business Process Management** (BPMS2 2025), organized by Rainer Schmidt and Selmin Nurcan, explores how social interactions integrate with business process management and how business process management may profit from this integration. Furthermore, the workshop investigates digitized social connections, their strengths, weaknesses and associated challenges and risks (underlying and/or generated) in the context of organized collaborative work.

In addition, the **Research Projects Track** was devoted to presenting future or ongoing research projects (e.g., H2020 or ERC projects, and national grants) in the context of Information Science. This track aimed to provide an opportunity for presenters to get feedback before submitting a research project or disseminating the intermediate results of their projects, and for participants to get an updated view of innovative ongoing research while getting in touch with potential research partners.

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