4ᵗʰ International Workshop on COllaboration MINing for Distributed Systems - Call for Papers

Theme

The Fourth Workshop on Collaboration Mining for Distributed Systems (CoMinDS 2025) aims to facilitate the sharing of research findings, ideas, and experiences on new process mining techniques and practices for analyzing collaboration processes. Process mining is a a powerful tool for analyzing business processes carried out by one participant. However, it lacks approaches able to deal with the analysis of collaboration processes implemented by many participants in a distributed system, e.g., supply chains involving manufacturers, producers, and retailers; healthcare scenarios involving patients, hospitals, and doctors; or even multi-agent systems and smart systems like multi-robot and IoT systems. Confidentiality, privacy, data heterogeneity, and case correlation are only a few of the issues related to these scenarios. At the same time, object-centric process mining extends the analysis to the interactions and dependencies between different objects across organizations. This is particularly important in inter-organizational process mining, where data is often spread across different domains with varying formats, structures, and privacy concerns. It helps to uncover hidden inefficiencies, bottlenecks, and coordination issues that arise when multiple entities are involved in a shared process.
To bridge this gap, specialized discovery algorithms, conformance techniques, and enhancement approaches are required. In this direction, the workshop points to creating a dialogue centered on the development of scientific foundations enabling the application of collaboration mining for distributed systems.

Topics

The main topics relevant to the CoMinDS workshop include, but are not limited to:

- Generation of Synthetic Distributed Event Logs
- Distributed Event Logs Preprocessing
- Correlation Mechanisms for Distributed Event Logs
- Discovery of Collaborative Process Models
- Conformance Metrics and Techniques for Collaborative Process Models
- Multi-perspective Analysis of Collaborative Processes
- Privacy-preserving Process Mining for Distributed Systems
- Distributed Systems Monitoring and Repair
- Federated Process Mining
- Streaming Collaboration Mining

- Object-centric Process Mining for Distributed Systems
- Case notions for collaborative process mining
- Collaborative process mining in application domains (e.g., healthcare, supply chain management)

Submission

The workshop welcomes submissions of regular full papers, abstracts, and posters. **Regular papers** must be original contributions not published or submitted to other conferences or journals in parallel with this workshop. Submissions must use the Springer LNCS/LNBIP format (https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines). Submissions must be in English and cannot exceed 12 pages (including tables, figures, the bibliography, and appendices). Accepted papers will be published by Springer as a post-workshop proceedings volume in the series Lecture Notes in Business Information Processing (LNBIP). At least one author of each accepted paper must register and participate in the workshop. Please visit the main conference website (https://icpmconference.org/2025/) for more information

Abstracts and posters could be ongoing research or non-research contributions such as case studies, experiences, lessons learned from projects, industry showcases, and software tool demonstrations significant for the workshop theme. Abstracts and poster presentations will take place in an interactive and participation-encouraging format based on the number and nature of the accepted contributions. Authors must submit max 2 pages for abstracts using the Springer LNCS/LNBIP format, or 1 page A0 for posters. Abstracts and posters will be uploaded to the workshop website. At least one author of each accepted abstract and poster must register and participate in the workshop.

Papers should contain a short abstract, clarifying the relation of the paper with the main topics (preferably using the list of topics above), clearly stating the problem being addressed, the goal of the work, the results achieved, and the relation to other work. Papers should be submitted electronically as a self-contained PDF file via the submission system (https://easychair.org/conferences/?conf=icpm2025). When submitting your paper in the submission system, please select the name of the workshop track, *Workshop: International Workshop on COllaboration MINing for Distributed Systems.*

The authors of selected regular papers will be invited to submit an extended version of their contributions to the Process Science journal.

Organisers

- Lorenzo Rossi, University of Camerino, Italy
- Andrea Delgado, Universidad de la República, Uruguay
- Sara Pettinari, Gran Sasso Science Institute, L'Aquila, Italy

- Mahsa Pourbafrani, RWTH Aachen University, Germany
- Mathias Weske, Hasso-Plattner-Institut, University of Potsdam, Germany

Program committee

- Andrea Burattin, Technical University of Denmark, Denmark
- Cristina Cabanillas, University of Seville, Spain
- Daniel Calegari, Universidad de la Republica, Uruguay
- Marco Comuzzi, Ulsan National Institute of Science and Technology, South Korea
- Flavio Corradini, University of Camerino, Italy
- Chiara Di Francescomarino, University of Trento, Italy
- Dirk Fahland, Eindhoven University of Technology, The Netherlands
- Marco Franceschetti, University of St. Gallen, Switzerland
- Orlenys López Pintado, University of Tartu, Estonia
- Giovanni Lugaresi, KU Leuven, Belgium
- Giovanni Meroni, Technical University, Denmark
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- Majid Rafiei, RWTH Aachen University, Germany
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- Flavia Santoro, Inteli - Instituto de Tecnologia e Liderança, Brazil
- Francesco Tiezzi, Università di Firenze, Italy
- Andrea Vandin, Sant'Anna di Pisa, Italy
- Matthias Weidlich, Humboldt-Universität zu Berlin, Germany
- Joyce El Haddad, University of Paris Dauphine, France

Important dates

- Abstract Submission: July 18, 2025 (AoE)
- Paper Submission: July 25, 2025 (AoE)
- Paper Acceptance Notification: August 22, 2025 (AoE)
- Pre-workshop Camera-Ready Papers: September 22, 2025 (AoE)
- Workshops: October 20, 2025
- Post-workshop Camera-Ready Papers: November 4, 2025 (AoE)

Contact email

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