

International Conference on Process Mining (ICPM 2019)
June 23-26, 2019, Aachen, Germany



**IEEE Task Force on
Process Mining**

IEEE Task Force on Process Mining (18.30-20.00)

18.30-18.45 Overview of the work of the IEEE Task Force on Process Mining (Wil van der Aalst)

18.45-19.00 Reflecting on this year's ICPM conference (Marcello La Rosa, Mieke Jans, Josep Carmona, Wil van der Aalst)

19.00-19.15 Preparations for ICPM 2020 in Padua (Massimiliano de Leoni, Alessandro Sperduti, Boudewijn van Dongen, Moe Wynn, and Montali Marco)

19.15-19.45 Discussion on shaping the ICPM conferences series, other activities of the Task Force, and the governance of the ICPM conference and the Task Force (Inaugural steering committee: Wil van der Aalst, Mieke Jans, Josep Carmona, Marcello La Rosa, and Boudewijn van Dongen)

19.45-20.00 Closing

We are entering a new phase ...

- The activities related to the Task Force and ICPM need to be unified. ICPM is the flagship conference of the Task Force (but there are other activities).
- First, we discuss/show:
 - past activities of the Task Force
 - ICPM 2019 and ICPM 2020
- Then, we discuss the governance of the Task Force and activities.

Inaugural steering committee

- Wil van der Aalst (chair)
- Mieke Jans
- Josep Carmona
- Marcello La Rosa
- Boudewijn van Dongen

The goal is to grow this to 10 members (discussed later).



Overview of the work of the IEEE Task Force on Process Mining

Wil van der Aalst

History

- **The IEEE Task Force on Process Mining was established in October 2009 as part of the IEEE Computational Intelligence Society**
- **Set of activities and members has expanded over the last decade, leading not only to ICPM, but also a manifesto, the XES standard, etc.**

Over 75 members (see website)



Send e-mail if you would like to join and work for the community.

Goals and activities

(formulated in 2009)

The goal of this Task Force is to promote the research, development, education and understanding of process mining. More concretely, the goal is to:

- make end-users, developers, consultants, and researchers aware of the state-of-the-art in process mining,
- promote the use of process mining techniques and tools and stimulate new applications,
- play a role in standardization efforts for logging event data,
- the organization of tutorials, special sessions, workshops, panels,
- the organization of Conferences/Workshop with IEEE CIS Technical Co-Sponsorship, and
- publications in the form of special issues in journals, books, articles (e.g., in the IEEE Computational Intelligence Magazine).

Goals and activities

creating awareness

articles, books

(e.g., popular press)

(online) courses

(Coursera PM course, etc.)

movies

(YouTube, etc.)

outreach
activities

(schools, leaflets, etc.)

sharing data

public data sets

(4TU data center, etc.)

standardization

(XES)

advancing knowledge

research

scientific
publications

advancing software

development

evaluation

community building

virtual
communities

(linkedin, facebook, etc.)

scientific
meetings

(BPI, ATAED, etc.)

industry
meetings

(PM Camp, etc.)

contests

(BPIIC, PDC, etc.)

Example: XES Standard

long-running process leading to an official IEEE standard

IEEE STANDARDS ASSOCIATION

STANDARDS DEVELOPMENT WORKING GROUP

XES WG - extensible Event Stream Working Group

MEMBERS

- J.C. Bose
- Josep Carmona
- Marlon Dumas
- Frank van Geffen
- Sukriti Goel
- Antonella Guzzo
- Rania Khalaf
- Rudolf Kuhn
- Teemu Lehto
- Felix Mannhardt
- Marco Montali
- Michael zur Muehlen
- Zbigniew Paszkiewicz
- Hajo Reijers
- Alexander Rinke
- Anne Rozinat
- Pinna Soffer
- Minseok Song
- Keith Swenson
- Walter Vanherle
- Wil van der Aalst
- Christian Günther
- Eric Verbeek

Active Projects Managed by this Working Group

Project: [XES: Standard for XES - extensible Event Stream - for Addressing Interoperability in Event Logs and Event Streams \(XES\)](#)



Tools supporting XES

Tool name	Version	Vendor	
Celonis Process Mining	4.2	Celonis SE	Import: A1, B1, C1, D1 (PDF , 9,277 KB)
Disco	2.0.0	Fluxicon	
Iciris Process Mining Factory	1	Iciris	
Minlit	1	Gradient ECH	
myInvenio	1	Cognitive Technology	
Pm4py	0.1	Open Source by PADS, RWTH	Import, Export: A-D, X (PDF , 3,006 KB)
ProcessGold Enterprise Platform	14	Processgold International B.V.	Import: A-D, X (PDF , 6,109 KB)
ProM	6.7	Open Source hosted at TU/e	Import, Export: A-D, X (PDF , 41,447 KB)
ProM Lite	1.2	Open Source hosted at TU/e	
QPR ProcessAnalyzer	2018.6	QPR	Import: A1, B1, C1, D1 (PDF , 6,109 KB)
RapidProM	4.0.0	Open Source hosted at TU/e	
Rialto Process	1.5	Esorix	
SNP Business Process Analysis	15.27	SNP Schneider-Neureither & Partner AG	



Contact Eric Verbeek to get your tool certified. Avoid egoistic behavior.

Example: Challenges and Datasets

- BPI Challenge
- Process Discovery Contest
- Conformance Checking Contest
- Dozens of data sets, see e.g. the publically available data sets on
 - https://data.4tu.nl/repository/collection:event_logs_real
 - https://data.4tu.nl/repository/collection:event_logs_synthetic

Many more activities, but:

- too little time to be even somewhat complete
- future activities will be discussed later



Reflecting on this year's ICPM conference

Marcello La Rosa, Mieke Jans, Josep Carmona, Wil van der Aalst

What worked well

- Community participation on short notice
- Reviewing process (carved from the BPM model)
- Papers quality on par with other conferences
- Organization!

What didn't work well

- Tight reviewing cycle & workload
- Exploitative vs innovative papers
- IEEE proceedings effort
- Fears of cannibalization
- Reserving time for contests in program

And...

We will be looking into the potential option of considering a hypothetical special issue of selected revised papers!



Preparations for ICPM 2020 in Padua

Massimiliano de Leoni, Alessandro Sperduti, Boudewijn van Dongen,
Moe Wynn, Montali Marco, and others

See <https://icpmconference.org/2020/>

What's next?

**Discussion on shaping the ICPM
conferences series, other activities of the
Task Force, and the governance of the
ICPM conference and the Task Force**

**Inaugural steering committee: Wil van der Aalst, Mieke Jans, Josep Carmona,
Marcello La Rosa, and Boudewijn van Dongen**

Two main topics

1. Identification of activities done by the task force and the work that needs to be distributed (too much work needs to be done by the usual suspects)
2. Agreement on the process to form a larger Steering Committee.

Assumption: We keep the IEEE Task Force on Process Mining, but this is also the entity managing the ICPM conference series (no duplications)

Activity: ICPM Conference

- Organize our flagship conference, i.e., appoint PC chairs, select locations, discuss with organizers, act as a liaison between the different parties (including IEEE).

Activity: Membership management

- **Maintain e-mail list and manage the memberships (may change as it is now).**

Activity: Website

- **Maintain the IEEE Task Force's website. Create a new URL. Cross-linking with the ICPM website icpmconference.org.**
- **This needs to be done by a team and is linked to many of the other activities.**

Activity: PM Newsletter (new)

- Create a newsletter (2-3 per year) with news on activities and case studies.
- Is used to refresh the case study repository.
- Distributed via the mailing list and other channels.

Activity: LinkedIn group and other social media

- Use the existing group or create a new LinkedIn group.
- Avoid duplication of work and have “official channels”
- Need to synchronize with George Varvaressos on this (needs to release control to make it an official channel, it cannot be both).

Activity: Contests and Awards

- BPI Challenge
- Process Discovery Contest
- Conformance Checking Contest
- Best PhD thesis
- ...

Activity: XES standardization and certification

- A more active team is needed. Now most of the work is done by Eric Verbeek.
- Avoid selfish behavior (standards are good for the field as a whole)

Activity: Data sets

- Create and maintain open data sets
- Linked to challenges

Activity: Other events (e.g., workshops)

- **Three types of workshops: (1) TF-ICPM workshops, (2) TF-non-ICPM workshops, and (3) TF-affiliated workshops.**
- **Existing workshops (incomplete):**
 - **Workshop on Business Process Intelligence and Workshop Process-Oriented Data Science for Healthcare at BPM**
 - **Algorithms and Theories for the Analysis of Event Data (ATAED) at Petri nets**
- **We need also a presence at IEEE CIS conferences,**
e.g., International Conference on Data Science, Technology and Applications (DATA), IEEE Symposium Series on Computational Intelligence (SSCI), IEEE Congress on Evolutionary Computation (CEC)

Activity: Other networks

- Create and maintain with other networks (e.g., regional or specialized).
- Example: SRC on Process Mining, but for example also PODS4H (Process-Oriented Data Science for Healthcare)?

The background features a dark blue field with a grid of small, lighter blue dots. The dots are arranged in a pattern that creates a sense of depth and movement, resembling a wavy surface or a digital landscape. The overall effect is modern and technological.

Steering Committee and Governance

Steering committee

- **Inaugural steering committee**
 - Wil van der Aalst (chair)
 - Mieke Jans
 - Josep Carmona
 - Marcello La Rosa
 - Boudewijn van Dongen
- **The goal is to grow this to approx. 10 members and to create bylaws. These should ensure transparency, stability, and increased activity.**

Steering committee

- There should be a clear rotation scheme (e.g., 3 years + 3 years). Ad-hoc at first.
- In steady-state people should be elected and there should be a continuous renewal.
- People can apply before August 31st 2019 by sending an e-mail to the members of the inaugural SC.
- The inaugural SC will meet at BPM and decide on the first additions (the goal is to add 5 more members).

Hard requirements to be part of the SC

- **Willingness to do tasks for the community.** The applicant should indicate which of the activities (s)he will do and how much time is available for this.
- **Firm promise to attend ICPM and the Task Force meetings each year (SC members that do not attend will be removed).**
- **Only senior researchers/experts with a proven track record should apply (not for junior researchers).**

We aim for a balanced SC composition

Diversity, as of:

- **Geographic balance (also representing the countries with many activities).**
- **Topic balance (process mining is a broad field with many sub-disciplines, also ranging from theoretical to more applied).**
- **Gender balance.**

Application

- Send to icpm_sc@lists.unimelb.edu.au
- Include:
 1. A short motivation letter.
 2. A detailed indication of the tasks you would like to perform (see list given before). You commit to work!
 3. Showing commitment and willingness to attend all ICPM conferences and task force meetings.
 4. A CV showing a good track record in process mining



Closing

See you all in Padua!



Process Mining Conference 2020

**2nd International Conference on Process Mining
(ICPM 2020)**

26-29 October, 2020, Padua, Italy