Summer School on Process Mining

Super C, RWTH Aachen University, Germany, 4–8 July 2022

Welcome to the first Process Mining Summer School (PMSS-22) organized by the IEEE Task Force on Process Mining and the Process and Data Science (PADS) group at RWTH Aachen University. This is a once-in-a-lifetime event and a landmark in the development of process mining.

Although process mining emerged in the late 1990s, only in recent years have organizations started to use it on a larger scale. Currently, there are over 40 process-mining vendors, and many of the bigger organizations use it to improve their processes. However, there are still many open scientific problems, and many practitioners are unaware of the foundational concepts. Therefore, the first Process Mining Summer School is not only timely, but also necessary. The interest in joining PMSS-22 was overwhelming.

Unfortunately, we had to decline many applications because of space constraints. We now have a group of 130 highly-qualified participants and 20 lecturers. All lecturers are well-known experts in process mining. This provides a unique opportunity for the participants to personally meet many of the pioneers that shaped the field.

In the context of PMSS-22, we also created the "Process Mining Handbook", which will serve as a valuable reference for years to come. Participants get a copy of the handbook. The handbook is also available as open access such that many can benefit from it. Also, the slides and recordings will be made available afterwards.

We thank the Alexander von Humboldt Foundation, Celonis, the RWTH Center of Artificial Intelligence, the Cluster of Excellence Internet of Production, and Springer for their support.

PMSS-22 follows the first International Conference on Process Mining (ICPM 2019), which also took place in Aachen. Aachen is well known for its historic old town center, e.g., the Aachen Cathedral was the first UNESCO World Heritage site in Germany. As part of the social program, you will also experience that the Netherlands and Belgium are within walking distance. Make sure to enjoy not only the lectures, but also the interactions with other participants and lecturers, the social program, and the beautiful views from Super C. Let's go #pmschool22!

Wil van der Aalst, on behalf of the PADS group and co-director Josep Carmona.

	Monday, July 4	Tuesday, July 5	Wednesday, July 6	Thursday, July 7	Friday, July 8
8:15 ●	Registration 📍 Super C				
8:45 ●	Introduction to Process Mining	Process Discovery II	Process Enhancement I	Predictive Process Monitoring	Applications II
10:45 ●	Process Discovery I	Conformance Checking II	Process Enhancement II	Process Mining in a Streaming Setting	Applications III
				Responsible Process Mining	
14:00 ●	Conformance Checking I	Data Preprocessing I	13:30 ● Hike to the Dreiländereck	Status and Future of Process Mining	
16:00 ●	Process Discovery III	Data Preprocessing II		Applications I	
18:45 ●	Welcome Dinner		19:00 ● Celonis Party	18:00 ● Reception Dinner	

Lecturers

Wil van der Aalst — RWTH Aachen University	Claudio Di Ciccio — Università La Sapienza di Roma	Chiara Ghidini — Fondazione Bruno Kessler	Felix Mannhardt — Eindhoven University of Technology
Rafael Accorsi — Accenture	Chiara Di Francescomarino — Fondazione Bruno Kessler	Mieke Jans — Hasselt University	Lars Reinkemeyer — Celonis
Andrea Burattin — Technical University of Denmark	Boudewijn van Dongen — Eindhoven University of Technology	Julian Lebherz — Maersk	Erik Verbeek — Eindhoven University of Technology
Josep Carmona — Universitat Politècnica de Catalunya	Marlon Dumas — University of Tartu	Niels Martin — Hasselt University	Jochen de Weerdt — KU Leuven
Massimiliano De Leoni — Università degli Studi di Padova	Dirk Fahland — Eindhoven University of Technology	Marco Montali — Free University of Bozen-Bolzano	Nils Wittig — KMS

Social Events

The welcome dinner is on Monday, July 4, 18:45–23:30 in Forum M, Buchkremerstraße 1–7, 52062 Aachen. Forum M is on the top floor of the Mayersche Buchhandlung Aachen, with a beautiful view over the city.

The hike to the "Dreiländereck" (Drielandenpunt in Dutch) starts on Wednesday, July 6, 13:30 from Super C. This is a **two-hour walk** with some drinks at the destination (**bring proper shoes**). Return is individual by hiking back or taking the city bus (descend to Vaalserquartier Vaals Grenze and then use bus 25, 33, or 55). Please check out the more detailed information and **get the "9 euro ticket"** beforehand.

The "After-Hiking Party" on Wednesday is sponsored and organized by Celonis in the Centre Charlemagne, Katschhof 1, 52062 Aachen (in-between the city hall and cathedral). The party starts at 19:00 with opportunities to dine, drink, and dance.

The final social event will take place in the RWTH SkyLounge on top of the main building (Templergraben 55, next to Super C) on Thursday, July 7, and starts at 18:30. The RWTH SkyLounge provides a beautiful view over Aachen. Drinks and food are provided.

For all social events, **bring your nametag**!
See http://www.process-mining-summer-school.org/ for details.

Process Mining Summer School Program

Time	Monday, July 4	Tuesday, July 5	Wednesday, July 6	Thursday, July 7	Friday, July 8
8:15	Registration — Super C				
8:45	Introduction to Process Mining: A 360 Degree View — Wil van der Aalst, RWTH Aachen (Germany)	Process Discovery II: Advanced Process Discovery Techniques — Eric Verbeek, TU/e (Netherlands) & Josep Carmona, UPC (Spain)	Process Enhancement I: Foundations of Process Enhancement — Massimiliano de Leoni, UNIPD (Italy)	Predictive Process Monitoring — Chiara Ghidini & Chiara Di Francescomarino, FBK (Italy)	Applications II: Using Process Mining for Financial Auditing — Mieke Jans, UHASSELT (Belgium)
10:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45	Process Discovery I: Foundations of Process Discovery — Wil van der Aalst, RWTH Aachen (Germany)	Conformance Checking II — Boudewijn van Dongen, TU/e (Netherlands)	Process Enhancement II: Process Mining over Multiple Behavioral Dimensions — Dirk Fahland, TU/e (Netherlands)	Process Mining in a Streaming Setting: Discovery and Conformance — Andrea Burattin, DTU (Denmark) [10:45]; Responsible Process Mining — Felix Mannhardt, TU/e (Netherlands) [11:30]	Applications III: Robotic Process Automation — Marlon Dumas, UT (Estonia) and Apromore
12:15	Lunch Break	Lunch Break	Lunch Break [12:15]	Lunch Break	Lunch Break
14:00	Conformance Checking I — Boudewijn van Dongen, TU/e (Netherlands)	Data Preprocessing I: Methods and Techniques for Event Log Preparation — Jochen de Weerdt, KU Leuven (Belgium)	Hike to the Dreiländereck [13:30] — from Super C	Status and Future of Process Mining: From Process Discovery to Process Executions [14:00] — Dr. Lars Reinkemeyer, VP Customer Transformation, Celonis SE [15:30]	Check out the details on process-mining-summer-school.org/program
15:30	Coffee Break	Coffee Break		Coffee Break	
16:00	Process Discovery III: Declarative Process Mining — Claudio Di Ciccio, Sapienza University of Rome & Marco Montali, UNIBZ (Italy)	Data Preprocessing II: A Practitioner's View on Process Mining Adoption, Event Log Engineering and Data Challenges — Rafael Accorsi, Accenture Switzerland; Julian Lebherz, A.P. Møller-Mærsk	Celonis Party [19:00] — Centre Charlemagne	Applications I: Process Mining in Healthcare [16:00] — Niels Martin, UHASSELT (Belgium) & Nils Wittig, Chief Experience Officer at KMS Vertrieb und Services AG (Germany); Reception Dinner [18:00] — RWTH SkyLounge	
18:45	Welcome Dinner — Forum M				

Practical Information

- Lectures start at 8:45 sharp every day. The registration starts at 8:15 on the first day (be sure to be there in time to allow for a smooth start).
- Attendance will be recorded each day. Participants that attend all lectures will get a digital certificate afterwards. Please do not cherry-pick lectures but enjoy the full program.
- The summer school will take place on the top floor of the Super C building of RWTH Aachen University (address: Templergraben 57, 52062 Aachen, 5 minutes walking from the center, 20 minutes from the main station).
- You can use Eduroam or the Wifi access information in your bag.
- See http://www.process-mining-summer-school.org/ for slides and information about the tools used. You will get a printed copy of the "Process Mining Handbook", but the link is also available on the website.
- Lunches and coffee breaks will be provided. Additionally, there are 300+ restaurants and 75+ cafes in Aachen. For example, in Pontstraße you can find various nice restaurants with reasonable prices.
- You can buy the "9 Euro Ticket" for all local transport in Germany for the whole month of July.
- Use the hashtag #pmschool22 to share impressions and experiences via social media (Twitter, LinkedIn, etc.).
- If you have any questions or need help, you can refer to someone from the PADS organization team.

Organizing and Supporting