

Curriculum Vitae

Personal Data

Title	Prof. Dr.
First name	Han
Name	Van der Aa
Current position	Junior Professor (W1), with a contract until March 31, 2026
Current institution(s)/site(s), country	School of Business Informatics, University of Mannheim, Germany
Identifiers/ORCID	0000-0002-4200-4937

Qualifications and Career

Stages	Periods and Details
Degree programme	MSc. in Business Information Systems (09/2010 -- 04/2013), Eindhoven University of Technology, the Netherlands BSc. in Industrial Engineering (09/2007 -- 07/2010) Eindhoven University of Technology, the Netherlands
Doctorate	PhD in Computer Science (05/2014 – 01/2018) Vrije Universiteit Amsterdam, the Netherlands Promotor: prof. dr. Hajo A. Reijers Thesis title: Comparing and Aligning Process Representations
Stages of academic/professional career	Junior professor (W1) , School of Business Informatics, University of Mannheim Germany (since 04/2020) Alexander von Humboldt Fellow (Post-doc) , Department of Computer Science, Humboldt-Universität zu Berlin (05/2018 – 03/2020) Post-doctoral Researcher , Department of Computer Sciences, Vrije Universiteit Amsterdam, the Netherlands (01/2018 – 04/2018) PhD Candidate , Department of Computer Sciences, Vrije Universiteit Amsterdam, the Netherlands (05/2014 – 01/2018) Longer research visits: <i>Visiting professor</i> at the Université Paris Dauphine, France (multiple visits during 10/2021 – 07/2022) <i>Visiting researcher</i> at the Technion – Israel Institute of Technology, Israel (11/2017 – 12/2017)

	Visiting researcher at the Vienna University of Business and Economics (06/2013 – 08/2013)
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Engagement in the Research System

Organization. My organizational activities are:

- Organizer of the *Working Conference on Business Process Modeling, Development, and Support* (BPMDS), since 2023 (ongoing)
- Organizer of the *Workshop on Natural Language Processing for Business Process Management* (NLP4BPM), since 2022 (ongoing)
- Mini-track chair of the *HICSS Mini-track on Business Process Technology*, since 2022 (ongoing)
- Organizer of the *1st Process Analytics Research Seminar* in Palma, Mallorca, 2022

Program committees. My service as a program committee (PC) member includes:

- Int. Conf. on *Advanced Information Systems Engineering* (CAISE), since 2023 (ongoing)
- Int. Conf. on *Process Mining* (ICPM), since 2021 (ongoing)
- Int. Conf. on *Business Process Management* (BPM), since 2020 (ongoing)
- Int. Conf. on *Cooperative Information Systems* (CoopIS), 2022
- Int. Conf. on *Distributed and Event-Based Systems* (DEBS), 2021
- Int. Joint. Conf. on *Neural Networks* (IJCNN), 2020
- Working Conf. on *Business Process Modeling, Development, and Support* (BPMDS), 2019 – 2022

Next to that, I am a regular PC member of the demo tracks and workshops of the flagship BPM and ICPM conferences, including the BPI, AI4BPM, DEC2H, and PQMI workshops.

Reviewer for journals. I have been a reviewer for journals, including:

- ACM Transactions on the Web
- Artificial Intelligence in Medicine
- Business & Information Systems Engineering
- Computer Standards & Interfaces
- Computers in Industry, Computing
- Data Mining and Knowledge Discovery
- Decision Support Systems
- Expert Systems with Applications
- IEEE Transactions on Knowledge and Data Engineering
- Information Systems
- Journal of Biomedical Informatics
- Journal of Software: Evolution and Process
- Journal on Data Semantics
- Requirements Engineering
- Software and Systems Modeling

Reviewer for funding agencies. I have been a reviewer for the following agencies:

- German Research Foundation (DFG)

- Swiss National Science Foundation (SNF)

Supervision of Researchers in Early Career Phases

I currently supervise two doctoral candidates at the University of Mannheim:

- Adrian Rebmann, started in June 2020
- Alexander Kraus, started in September 2020

In the first half of 2023, I will start supervision of a third doctoral candidate, who will be externally employed by SAP Signavio.

Scientific Results

Category A. The following works are selected because they capture the different research streams I am involved in, their publication in flagships venues of the BPM community (#1,2,5,6,9,10) and of associated communities (#3,4,7,9), and correspond to achievements made through different roles, ranging from works where I was the primary author (#6,8,9,10), the second contributor (#3,5,7), and the responsible PhD supervisor and group leader (#1,2,4):

1. Adrian Rebmann, **Han van der Aa**: *Enabling Semantics-aware Process Mining through the Automatic Annotation of Event Logs*. Information Systems, 110: 102111 (2022). DOI: [10.1016/j.is.2022.102111](https://doi.org/10.1016/j.is.2022.102111)
2. Adrian Rebmann, Jana-Rebecca Rehse, **Han van der Aa**: *Uncovering Object-centric Data in Classical Event Logs for the Automated Transformation from XES to OCEL*. 20th International Conference on Business Process Management (BPM 2022). DOI: [10.1007/978-3-031-16103-2_25](https://doi.org/10.1007/978-3-031-16103-2_25)
3. Bernhard Schäfer, **Han van der Aa**, Henrik Leopold, Heiner Stuckenschmidt: *Sketch2Process: End-to-end BPMN Sketch Recognition Based on Neural Networks*. IEEE Transactions on Software Engineering, accepted for publication (2022). DOI: [10.1109/TSE.2022.3228308](https://doi.org/10.1109/TSE.2022.3228308)
4. Adrian Rebmann, Matthias Weidlich, **Han van der Aa**: *GECCO: Constraint-driven Abstraction of Low-level Event Logs*. 38th IEEE International Conference on Data Engineering (ICDE 2022). DOI: [10.1109/ICDE53745.2022.00016](https://doi.org/10.1109/ICDE53745.2022.00016)
5. Martin Bauer, **Han van der Aa**, Matthias Weidlich: *Sampling and Approximation Techniques for Efficient Process Conformance Checking*. Information Systems 104: 101666, 2022. DOI: [10.1016/j.is.2020.101666](https://doi.org/10.1016/j.is.2020.101666)
6. **Han van der Aa**, Adrian Rebmann, Henrik Leopold: *Natural language-based detection of semantic execution anomalies in event logs*. Information System 102: 101824, 2021. DOI: [10.1016/j.is.2021.101824](https://doi.org/10.1016/j.is.2021.101824)
7. Bo Zhao, **Han van der Aa**, Nguyen Thanh Tam, Nguyen Quoc Viet Hung, Matthias Weidlich: *EIRES Efficient Integration of Remote Data in Event Stream Processing*. ACM SIGMOD International Conference on Management of Data (SIGMOD 2021). DOI: [10.1145/3448016.3457304](https://doi.org/10.1145/3448016.3457304)
8. **Han van der Aa**, Henrik Leopold, Hajo A. Reijers: *Efficient Process Conformance Checking on the Basis of Uncertain Event-to-Activity Mappings*. IEEE Transactions on Knowledge and Data Engineering 32(5): 927-940, 2020. DOI: [10.1109/TKDE.2019.2897557](https://doi.org/10.1109/TKDE.2019.2897557)
9. **Han van der Aa**, Henrik Leopold, Matthias Weidlich: *Partial Order Resolution of Event Logs for Process Conformance Checking*. Decision Support Systems 136: 113347, 2020. DOI: [10.1016/j.dss.2020.113347](https://doi.org/10.1016/j.dss.2020.113347)

10. **Han van der Aa**, Henrik Leopold, Hajo A. Reijers: *Comparing Textual Descriptions to Process Models – The Automatic Detection of Inconsistencies*. Information Systems 64: 447-460, 2017. DOI: [10.1016/j.is.2016.07.010](https://doi.org/10.1016/j.is.2016.07.010)

Academic Distinctions

My work has so far received the following distinctions:

- Best student paper at the Int. Conf. on Process Mining (ICPM) 2021
- Best student paper at the Int. Conf. on Conceptual Modeling (ER) 2020
- Runner-up best paper at the Int. Conf. on Business Process Management (BPM) 2019
- Runner-up best PhD Thesis at the Int. Conf. on Business Process Management (BPM) 2018
- Runner-up best paper at the Int. Conf. on Advanced Information Systems Engineering (CAISE) 2017

Data protection and consent to the processing of optional data

[X] I expressly consent to the processing of the voluntary (optional) information, including “special categories of personal data”¹ in connection with the DFG’s review and decision-making process regarding my proposal. This also includes forwarding my data to the external reviewers, committee members and, where applicable, foreign partner organisations who are involved in the decision-making process. To the extent that these recipients are located in a third country (outside the European Economic Area), I additionally consent to them being granted access to my data for the above-mentioned purposes, even though a level of data protection comparable to EU law may not be guaranteed. For this reason, compliance with the data protection principles of EU law is not guaranteed in such cases. In this respect, there may be a violation of my fundamental rights and freedoms and resulting damages. This may make it more difficult for me to assert my rights under the General Data Protection Regulation (e.g. information, rectification, erasure, compensation) and, if necessary, to enforce these rights with the help of authorities or in court.

I may **revoke** my consent in whole or in part at any time – with effect for the future, freely and without giving reasons – vis-à-vis the DFG (postmaster@dfg.de). The lawfulness of the processing carried out up to that point remains unaffected. Insofar as I transmit “special categories of personal data” relating to third parties, I confirm that the necessary legitimization under data protection law exists (e.g. based on consent).

I have taken note of the DFG’s Data Protection Notice relating to research funding, which I can access at www.dfg.de/privacy_policy and I will forward it to such persons whose data the DFG processes as a result of being mentioned in this CV.

¹ Special categories of personal data are those “revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and (...) genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person’s sex life or sexual orientation” (Article 9(1) GDPR).