

Curriculum Vitae

Prof. Dr. Henrik Leopold

Name: Henrik Leopold
Date of Birth: 24/05/1986
Place of Birth: Leipzig, Germany
Marital Status: Married to Franziska Leopold
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EDUCATION

- 01/2011
⇒ 07/2013
Ph.D. in Information Systems
Thesis title: "Natural Language in Business Process Models"
Humboldt University of Berlin
Advisor: Prof. Dr. Jan Mendling (WU Vienna)
Degree: Dr. rer. pol. (summa cum laude)
- 10/2008
⇒ 10/2010
Study of Information Systems
Humboldt University of Berlin
Title of Master Thesis: "Modularization of Process Models Using Natural Language Techniques"
Degree: Master of Science
- 10/2005
⇒ 09/2008
Study of Information Systems
Berlin School of Economics and Law (Dual study program)
Degree: Bachelor of Science
- 08/1998
⇒ 07/2005
High School
Max-Reinhardt-Gymnasium, Berlin
Degree: Abitur (High School Diploma)

APPOINTMENTS

- 06/2020
⇒ today
Associate Professor (with tenure)
Kühne Logistics University
Area: Data Science and Business Intelligence
- 02/2019
⇒ today
Senior Researcher
Hasso Plattner Institute, University Potsdam
Associated group: Business Process Technology (Prof. Dr. Mathias Weske)
- 02/2019
⇒ 06/2020
Assistant Professor
Kühne Logistics University
Area: Data Science and Business Intelligence

02/2015 ⇒ 01/2019	Assistant Professor VU Amsterdam, Amsterdam, The Netherlands Department of Computer Science
04/2014 ⇒ 01/2015	Assistant Professor WU Vienna, Vienna, Austria Institute for Information Business
01/2011 ⇒ 01/2015	Research Assistant Humboldt University of Berlin, Berlin, Germany Institute of Information Systems
10/2005 ⇒ 12/2010	Student Employee Bayer Healthcare AG, Berlin, Germany

TEN MOST IMPORTANT PUBLICATIONS

The list below contains the ten most important publications ordered by year. PDF copies of all publications are available at www.henrikleopold.com.

1. H. van der Aa, A. Rebmann, and H. Leopold. Natural language-based detection of semantic execution anomalies in event logs. *Information Systems*, 102:101824, 2021
2. H. van der Aa, H. Leopold, and M. Weidlich. Partial order resolution of event logs for process conformance checking. *Decision Support Systems*, 136, 2020.
3. H. van der Aa, H. Leopold, and H. 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.
4. C. Meilicke, H. Leopold, E. Kuss, H. Stuckenschmidt, and H. A. Reijers. Overcoming individual process model matcher weaknesses using ensemble matching. *Decision Support Systems*, 100:15–26, 2017.
5. H. van der Aa, H. Leopold, and H. A. Reijers. Comparing textual descriptions to process models - the automatic detection of inconsistencies. *Information Systems*, 2016.
6. F. Pittke, H. Leopold, and J. Mendling. Automatic detection and resolution of lexical ambiguity in process models. *IEEE Transactions on Software Engineering*, 41(6):526–544, 2015.
7. H. Leopold, J. Mendling, and A. Polyvyanyy. Supporting process model validation through natural language generation. *IEEE Transactions on Software Engineering*, 40(8):818–840, 2014.
8. H. Leopold, R.-H. Eid-Sabbagh, J. Mendling, L. G. Azevedo, and F. A. Baião. Detection of naming convention violations in process models for different languages. *Decision Support Systems*, 56:310–325, 2013.
9. H. Leopold, S. Smirnov, and J. Mendling. On the refactoring of activity labels in business process models. *Information Systems*, 37(5):443–459, 2012.
10. H. Leopold, M. Niepert, M. Weidlich, J. Mendling, R. Dijkman, and H. Stuckenschmidt. Probabilistic optimization of semantic process model matching. In *International Conference on Business Process Management*, pages 319–334. Springer, 2012.

AWARDS

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| 2017 | Runner-up best paper award at CAiSE 2017
Awarded for our paper “Checking process compliance on the basis of uncertain event-to-activity mappings”. |
| 2014 | TARGION Dissertation Award (10,000 €)
Awarded for the best dissertation in the area of strategic information management and digitalization. |
| 2013 | Runner-up of the McKinsey Technology Award (3,000 €)
Awarded for my research on natural language generation from business process models. |

INVITED TALKS

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|---------|---|
| 05/2021 | Leuphana University of Lüneburg
Detecting Execution Anomalies in Event Logs Using Natural Language Processing |
| 01/2020 | Kiel University, Germany
Automatically Identifying Automation Candidates |
| 05/2018 | WU Vienna, Austria
Evidence-Based Conformance Checking for Event Logs with Coarse-grained Timestamps |
| 07/2017 | WU Vienna, Austria
Checking Process Compliance on the Basis of Uncertain Event-to-Activity Mappings |
| 11/2017 | Wageningen University, The Netherlands
Natural Language Processing in Process Modelling: The Present and the Future |
| 10/2017 | ING Bank, Amsterdam, The Netherlands
Process Mining for Automated Compliance Checking |
| 04/2016 | ICT4V, Montevideo, Uruguay
Natural Language Generation from Process Models |
| 09/2015 | University of Havana, Cuba
Business Process Management in Research and Practice |
| 11/2014 | Goethe University Frankfurt, Germany
Generation of Natural Language Texts from Business Process Models |

01/2013	Technion - Israel Institute of Technology, Haifa, Israel Natural Language Analysis in Business Process Models
04/2012	UNIRIO, Rio de Janeiro, Brazil Textual Analysis of Activity Labels of Business Process Models

RESEARCH VISITS

09/2014 ⇒ 11/2014	University of Mannheim, Mannheim, Germany Chair of Artificial Intelligence Work on process model matching Invited and funded by the University of Mannheim
03/2012 ⇒ 04/2012	UNIRIO, Rio de Janeiro, Brazil Department of Applied Informatics Work on Multi-lingual detection of process model guideline violations Funded by the German Academic Exchange Service (DAAD)
04/2010 ⇒ 07/2010	Technical University of Eindhoven, Eindhoven, The Netherlands School of Industrial Engineering, Information Systems Preparation of Master Thesis

TEACHING EXPERIENCE

LIST OF TAUGHT COURSES

2021	Data Preparation and Integration Lecture and tutorial, Bachelor, Kühne Logistics University	~ 15 participants
2021	Data Science Lecture and tutorial, Master, Kühne Logistics University	~ 60 participants
2020	Process Mining Lecture, Master, Hasso Plattner Institute	~ 15 participants
2020	Data Preparation and Integration Lecture and tutorial, Bachelor, Kühne Logistics University	~ 15 participants
2020	Data Science Lecture and tutorial, Master, Kühne Logistics University	~ 40 participants
2019	Process Mining Lecture, Master, Hasso Plattner Institute	~ 15 participants

2019	Progammig with Python Lecture and tutorial, Bachelor, Kühne Logistics University	~ 15 participants
2019	Data Management Lecture and tutorial, Bachelor, Kühne Logistics University	~ 15 participants
2018	Business Modeling and Requirements Engineering Lecture and tutorial, Bachelor, VU Amsterdam	~ 100 participants
2018	Business Process Analytics Lecture and tutorial, Master, VU Amsterdam	~ 150 participants
2017	Business Modeling and Requirements Engineering Lecture and tutorial, Bachelor, VU Amsterdam	~ 100 participants
2017	Business Process Analytics Lecture and tutorial, Master, VU Amsterdam	~ 130 participants
2017	Process Management Lecture and tutorial, Master, University of Mannheim	~ 100 participants
2016	Business Process Analytics Lecture and tutorial, Master, VU Amsterdam	~ 100 participants
2015	Introduction to Multimedia, Information and Management Seminar, Bachelor, VU Amsterdam	~ 15 participants
2015	Academic English Seminar, Bachelor, VU Amsterdam	~ 15 participants
2015	Information Management Lecture and tutorial, Bachelor, VU Amsterdam	~ 120 participants
2015	Business Process Management and IT Strategy Lecture and tutorial, Master, University of Havana	~ 25 participants
2014	Business Information Systems II Lecture and tutorial, Bachelor, WU Vienna	~ 40 participants
2014	Business Information Systems II Lecture and tutorial, Bachelor, WU Vienna	~ 40 participants
2014	Foundations of BPM and Enterprise Systems Lecture, Bachelor, Humboldt University of Berlin	~ 50 participants

2013	Advanced BPM and Enterprise Systems Lecture, Master, Humboldt University of Berlin	~ 60 participants
2013	Information Systems I (Wirtschaftsinformatik I) Lecture and tutorial, Bachelor, Humboldt University of Berlin	~ 250 participants
2013	Advanced Information Systems Seminar, Master, Humboldt University of Berlin"	~ 15 participants
2013	Foundations of BPM and Enterprise Systems Lecture, Bachelor, Humboldt University of Berlin	~ 50 participants
2013	Advanced BPM and and Enterprise Systems Seminar, Master, Humboldt University of Berlin	~ 15 participants
2012	Advanced BPM and Enterprise Systems Lecture, Bachelor, Humboldt University of Berlin	~ 60 participants
2012	Information Systems I (Wirtschaftsinformatik I) Lecture and tutorial, Bachelor, Humboldt University of Berlin	~250 participants
2012	Advanced Information Systems Seminar, Master, Humboldt University of Berlin	~ 25 participants
2012	Foundations of BPM and Enterprise Systems Lecture, Bachelor, Humboldt University of Berlin	~ 50 participants
2012	Advanced BPM and and Enterprise Systems Seminar, Master, Humboldt University of Berlin	~ 15 participants
2011	Advanced Information Systems Seminar, Master, Humboldt University of Berlin	~ 25 participants

ACQUISITION OF THIRD-PARTY FUNDS

09/2021 ⇒ 08/2024	Grant from German Research Foundation (DFG) Project title: Automated process weakness identification based on social media posts Role: Main applicant and principal investigator 276,700 €
02/2019 ⇒ 02/2023	Grant from Dutch Research Council (NWO) Project title: Automatic Derivation of Event Logs (AutoDrive) Call: Open Technology Program Role: Main applicant and principal investigator 259,176 €

01/2018 ⇒ 01/2022	Grant from Dutch Research Council (NWO) Project title: Techniques for the Analysis of Client-Team Interactions (TACTICS) Call: C2D Data Science for Evolving Data Role: Co-applicant and PhD advisor 443,268 € (total project volume: 744,094) €
08/2015 ⇒ 08/2016	Grant from Dutch Research Council (NWO) Project title: Software for the Analysis of Dental Implant Quality (SADIQ) Call: Innovative public private partnership in ICT - Knowledge innovation mapping (IPPSI-KIEM) Role: Main applicant and principal investigator 78,879 €
07/2014 ⇒ 01/2015	Project with UniCredit Bank Austria AG Project title: Automatic identification of service candidates in process model repositories Type: Direct industry funding Role: Main applicant and principal investigator 20,000 €
01/2015 ⇒ 01/2019	Grant from European Union Project title: RISE_BPM Call: European Union's Horizon 2020 research and innovation programme - Marie Skłodowska-Curie Research and Innovation Staff Exchange Role: Co-applicant 324,000 € (total project volume: 1,273,500 €)
07/2014 ⇒ 01/2015	Project with Signavio GmbH Project title: Automatic quality assurance of process models Type: Direct industry funding Role: Main applicant and principal investigator 4,000 €
03/2012 ⇒ 04/2012	Scholarship from German Academic Exchange Institution (DAAD) Project title: Linguistic Analysis of Process Models Purpose: Research visit to the Federal University of the State of Rio de Janeiro My Role: Main applicant and principal investigator 2,500 €
<u>Total amount</u>	<u>1,408,523 €</u>

SCIENTIFIC SERVICE

EDITORIAL APPOINTMENTS

Since 02/2017 **Associate Editor**
Business & Information Systems Engineering (BISE)

CHAIRING AND ORGANIZATION

2022	PC Chair International Workshop on Enterprise Modeling and Information Systems Architectures (EMISA 2022)
2022	Mini Track Chair Hawaii International Conference on System Sciences (HICSS 2022) Mini Track: Business Process Technology
2020	Track Chair International Conference on Wirtschaftsinformatik (WI 2020) Track: Digital Processes and Architectures
2019	Track Chair European Conference on Information Systems (ECIS 2019) Track: Modelling and Managing the Digital Enterprise and its Business Processes
2017	Demo Chair International Conference on Business Process Management (BPM 2017)
2017	Program Co-Chair International Workshop on Process Querying (PQ 2017)
2016	Program Co-Chair Workshop on Business Process Management and Ontologies (BPMO 2016)
2015	Contest Chair Process Model Matching Contest (PMMC 2015)
2015	Program Co-Chair International Workshop on Enterprise Modelling and Information Systems Architectures (EMISA 2015)
2015	Publicity Chair International Conference on Business Process Management (BPM 2015)
2013	Contest Chair Process Model Matching Contest (PMMC 2013)

REVIEWER FOR JOURNALS

CSUR	ACM Computing Surveys
TMIS	ACM Transactions on Management Information Systems
BPMJ	Business Process Management Journal
ComInd	Computers in Industry
DKE	Data & Knowledge Engineering
DSS	Decision Support Systems
FGCS	Future Generation Computer Systems
TSC	IEEE Transactions on Services Computing
TSE	IEEE Transactions on Software Engineering
IPL	Information Processing Letters
IS	Information Systems
JSS	Journal of Systems and Software
JODS	Journal on Data Semantics
SoSyM	Software and Systems Modeling

PROGRAM COMMITTEE (CONFERENCES)

2019 ⇒ today	ICPM	International Conference on Process Mining
2017 ⇒ today	CAiSE	International Conference on Advanced Information Systems Engineering
2015 ⇒ today	BPM	International Conference on Business Process Management
2016 ⇒ 2020	EDOC	IEEE Enterprise Computing Conference
2015 ⇒ 2020	ICSOC	International Conference on Service Oriented Computing

PROGRAM COMMITTEE (WORKSHOPS, DEMO TRACKS, AND PHD TRACKS)

2021	BPMDs	Business Process Modeling, Development and Support
2020	IntelLanG	ECAI Workshop on Intelligent Information Processing and Natural Language Generation
2020	BPM Cases	BPM Cases Collection
2020	BPMDs	Business Process Modeling, Development and Support
2020	EMISA	International Workshop on Enterprise Modeling and Information Systems Architectures
2019	GPNP	GP Nachwuchspreis
2018	AMMoRe	International Workshop on Analytics and Mining of Model Repositories
2018	AI4BPM	Artificial Intelligence for Business Process Management
2018	BDA	International Workshop on Business Data Analytics
2018	AMMoRe	Workshop on Analytics and Mining of Model Repositories

2017	CBPM	Workshop on Cognitive Business Process Management
2016 ⇒ today	PQ	International Workshop on Process Querying
2016	ModTools	Workshop on Methodical Development of Modeling Tools
2015	ProMoS	International Workshop on Process Modelling Support Systems
2014	ICSOC	PhD Symposium of ICSOC
2014 ⇒ 2015	EDOC	Demo Track of IEEE EDOC
2013 ⇒ today	ZEUS	European Workshop on Services and their Composition
2013	BSC	International Business and System Conference
2013	BPD	International Workshop on Business Process Design
2012	BPMN	International Workshop on the Business Process Model and Notation
2012 ⇒ 2016	BPM	Demo Track of BPM

REVIEWER FOR CONFERENCES

2017	DESRIST	International Conference on Design Science Research in Information Systems and Technologies
2016 ⇒ 2018	ICIS	International Conference on Information Systems
2015	HICSS	Hawaii International Conference on System Sciences
2015	Informatik	Annual Meeting of the Society for Computer Science
2015	ER	International Conference on Conceptual Modeling
2013 ⇒ 2017	ECIS	European Conference on Information Systems
2013 ⇒ today	WI	International Conference on Wirtschaftsinformatik
2012 ⇒ 2016	CAiSE	International Conference on Advanced Information Systems Engineering
2012 ⇒ 2014	CoopIS	International Conference on Cooperative Information Systems
2011	BPMN	International Workshop on the Business Process Model and Notation

REVIEWER FOR FUNDING AGENCIES

2021	DFG	German Research Foundation
2021	ANID	National Research and Development Agency - Chile
2017	FWO	Research Foundation – Flanders
2016, 2017	ARRS	Slovenian Research Agency

OUTREACH

I believe in the benefits of cooperating with industry. It is a great opportunity for both transferring research insights and discovering new research problems. I initiated industry research projects with

- Artiliance BV, Utrecht, The Netherlands
- Bank Austria AG, Vienna, Austria
- DNB (Dutch Central Bank), Amsterdam, The Netherlands
- ING Bank, Amsterdam, The Netherlands
- Lana Labs GmbH, Berlin, Germany
- LunetZorg, Eindhoven, The Netherlands
- KNMT (Royal Dutch Dental Association), Utrecht, The Netherlands
- Precedence BV, Maastricht, The Netherlands
- Signavio GmbH, Berlin, Germany
- UWV (Employee Insurance Agency), Amsterdam, The Netherlands

I am also co-founder and former chief scientist of the startup company ACCHA¹, which provides a platform for managing software requirements based on artificial intelligence techniques.

LANGUAGES

- German (native)
- English (fluent in reading, writing, and speaking)
- Dutch (conversational)
- Spanish (basic)

PROFESSIONAL MEMBERSHIPS

- German Informatics Society (GI)
- Association of Information Systems (AIS)
- IEEE Task Force on Process Mining

¹<https://accha.nl/>