

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
Children: Jona Milian, 3 years
Address: Holteistraße 14, 10245 Berlin
Mobile: +49 (0)175 5631 251
E-Mail: henrik.leopold@the-klu.org
Web: www.henrikleopold.com



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

- | | |
|------|--|
| 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

- | | |
|---------|---|
| 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/>