# Alexander Nolte

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SCOPUS: 9

Google Scholar h-index: 12

https://scholar.google.com/citations?user=oVmnoQQAAAAJ&hl=en

#### Education

2009 - 2014 University Duisburg-Essen, Faculty of Business Administration and Economics

Dr. rer. nat. (PhD in Information Systems)

Dissertation: Flexibilisierung kollaborativer Prozessmodellierung durch den Einsatz webbasierter

Modellierungswerkzeuge (written in German)

Sehr gut (magna cum laude)

Advisor: Prof. Dr. Thomas Herrmann (Ruhr-University Bochum, Germany) Advisor: Prof. Dr. Volker Gruhn (University Duisburg-Essen, Germany)

TU Dortmund University, Department of Computer Science 1999 - 2008

Dipl.-Inform. (MSc equivalent in Computer Science)

Thesis: Konzept und Prototyp eines Usability orientierten webbasierten Editors für semi-

strukturierte Modellierung (German)

### Work experience

2020 – present	Associate Professor	University of Tartu, Estonia
2020 – present	Adjunct Associate Professor	Carnegie Mellon University, Pittsburgh, USA
2018 – 2020	Lecturer (Assistant Professor)	University of Tartu, Estonia
2018 – 2020	Adjunct Assistant Professor	Carnegie Mellon University, Pittsburgh, USA
2017 - 2018	Research Associate	Carnegie Mellon University, Pittsburgh, USA
2017 - 2018	Postdoctoral Fellow	University of Pittsburgh, USA
2017	Adjunct Faculty	University of Pittsburgh, USA
2016 – 2017	Visiting Research Fellow	University of Pittsburgh, USA
2016 – 2017	Temporary Research Programmer	Carnegie Mellon University, Pittsburgh, USA
2016 – 2017	Online Tutor	EURO-FH University of Applied Sciences, Hamburg, Germany
2014 - 2016	Postdoctoral Research Fellow	Ruhr-University Bochum, Germany
2009 - 2014	Researcher	Ruhr-University Bochum, Germany
2013	Visiting Research Fellow	Queensland University of Technology, Brisbane, Australia
2011 - 2018	Process Management Consultant a	and Coach
2008 – 2009	Co-founder and Front-end Develo	per fromatob.com

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## Awards and professional recognition

2021	Best Paper Award for the paper "Interpreting externally expressed intentions of an autonomous vehicle" presented at the <i>International Conference on Human System Interaction (HSI)</i>
2020	Runner-up for 2019 Best Paper Award for the paper "Designing Corporate Hackathons With a Purpose" published in <i>IEEE Software</i>
2019	ACM SIGSOFT Distinguished Paper Award for the paper "Going Farther Together: The Impact of Social Capital on Sustained Participation in Open Source" presented at the <i>International Conference on Software Engineering (ICSE)</i>
2016	Special award Sandro D'Atri for the paper "Socio-technical Process Design – The Case of Coordinated Service Delivery for Elderly People" presented at the <i>Conference of the Italian Chapter of the Association for Information Systems (itAIS)</i>

## **Grants and scholarships**

2020 – 2025	Estonian Research Council (ERC)  Applied research project "Prescriptive Monitoring of Business Processes" (Co-author and senior personnel, lead of WP4 – Usability of Prescriptive Process Monitoring, 675.000 € total funding value, ~100.000 € for WP4)
2019 - 2021	Estonian Research Council (ERC) – NUTIKAS program  Applied research project "Applied Research on Development of Autonomous Driving Lab for Level 4  Autonomy" (Co-author and senior personnel, co-lead of WP7 – human vehicle interaction,  1.201.000 € total funding value, ~50.000 € for WP7)
2017 - 2019	Deutsche Forschungsgemeinschaft (DFG) Research fellowship for the project <i>Supporting sustained collaboration over time in hybrid collocated and online settings</i> at the University of Pittsburgh, PA, USA (principal investigator, 103.249,80 €)
2013 - 2017	Bundesministerium für Bildung und Forschung (BMBF) Applied research project "Kompetenzorientiertes Unternehmenscoaching für ein nachhaltiges Kompetenzmanagement in KMU (4C4Learn)" (Co-author and senior personnel, lead of WP2 – Entwicklung betriebsspezifischer Kompetenzmodelle und IT-Umsetzung, 1.180.000 € total funding value, 158.492,40 € for WP2)
2013	German Academic Exchange Service (DAAD) Scholarship for a short-term research visit, Queensland University of Technology, Brisbane, Australia (PI, 5.256 €)
2008	Bundesministeriums für Wirtschaft und Energie (BMWi) eXist Business Start-up Grant, RWTH Aachen University, Germany (Co-founder, 11.600 €)

## **Published open resources**

2020	Hackathon Planning Kit – A web-based multi-level methodological framework to help prospective hackathon planners navigate the numerous design and planning decisions to make their event a success ( <a href="https://hackathon-planning-kit.org/">https://hackathon-planning-kit.org/</a> )
2020	RuM – An open-source desktop application that provides a comprehensive set of declarative process mining tools in a single unified package that is easy to use for process mining novices and experts ( <a href="https://rulemining.org/">https://rulemining.org/</a> )

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#### **Selected publications**

**Journals** 

**Nolte, A.**, Chounta, I. - A.. & Herbsleb, J. D. (2020). What Happens to All These Hackathon Projects? - Identifying Factors to Promote Hackathon Project Continuation. *Proc. ACM Hum.-Comput. Interact. 4*, CSCW2, Article 145 (October 2020), 26 pages.

**Nolte, A.**, Hayden, L. B. & Herbsleb, J. D. (2020). How to Support Newcomers in Scientific Hackathons - An Action Research Study on Expert Mentoring. *Proc. ACM Hum.-Comput. Interact. 4*, CSCW1, Article 25 (May 2020), 23 pages.

Jahnke, I., Meinke-Kroll, M., Todd, M., & **Nolte, A.** (2020). Exploring Artifact-Generated Learning with Digital Technologies: Advancing Active Learning with Co-design in Higher Education Across Disciplines. *Technology, Knowledge and Learning*.

Pe-Than, E. P. P., **Nolte, A.**, Filippova, A., Bird, C., Scallen, S. & Herbsleb, J. D. (2020). Corporate Hackathons, How and Why? A multiple case study of motivation, project proposal and selection, goal setting, coordination, and project continuation. *Human-Computer Interaction*.

Pe-Than, E. P. P., **Nolte, A.**, Filippova, A., Bird, C., Scallen, S. & Herbsleb, J. D. (2019). Designing Corporate Hackathons With a Purpose. *IEEE Software 36*. 1, 15–22. (**Runner-up for 2019 Best Paper Award**).

**Nolte, A.**, Pe-Than, E. P. P., Filippova, A., Bird, C., Scallen, S. & Herbsleb, J. D. (2018). You Hacked and Now What? - Exploring Outcomes of a Corporate Hackathon. *Proc. ACM Hum.-Comput. Interact. 2*, CSCW, 129:1-129:23.

Chounta, I. A., **Nolte, A.**, Hecking, T., Farzan, R., & Herrmann, T. (2017). When to Say "Enough is Enough!": A Study on the Evolution of Collaboratively Created Process Models. *Proc. ACM Hum.-Comput. Interact* 1., CSCW, 33:1-33:21.

**Nolte, A.**, Bernhard, E., Recker, J., Pittke, F., & Mendling, J. (2016). Repeated Use of Process Models: The Impact of Artifact, Technological and Individual Factors. *Decision Support Systems*, 88, 98–111.

Conferences

Oidekivi, M., **Nolte, A.**, Aabloo, A., & Kruusamäe, K. (2021). Interpreting externally expressed intentions of an autonomous vehicle. In: *International Conference on Human System Interaction*. (pp. 161-121). IEEE (**Best Paper Award**).

Imam, A., Dey, T., **Nolte, A.**, Mockus, A. & Herbsleb, J. D. (2021). The Secret Life of Hackathon Code – Where does it come from and where does it go? In: *International Conference on Mining Software Repositories* (pp. 68-79).

van der Aa, H., Balder, K. J., Maggi, F. M., & **Nolte, A.** (2020). Say It in Your Own Words: Defining Declarative Process Models Using Speech Recognition. In: *Business Process Management Forum. BPM 2020* (pp. 51-67). Springer

Alman, A., Di Ciccio, C., Haas, D., Maggi, F. M., & **Nolte, A.** (2020) Rule Mining with RuM. In: *2nd International Conference on Process Mining* (pp. 114-121). Springer.

Medina Angarita, M. A., & **Nolte, A.** (2020). What do we know about hackathon outcomes and how to support them? – A systematic literature review. In: *Collaboration Technologies and Social Computing* (pp. 50-64). Springer.

Affia, A. O., **Nolte, A.**, & Matulevičius, R. (2020). Developing and Evaluating a Hackathon Approach to Foster Security Learning. In: *Collaboration Technologies and Social Computing* (pp. 3-19). Springer.

Qiu, H. S., **Nolte, A.**, Brown, A., Serebrenik, A., & Vasilescu, B. (2019). Going Farther Together: The Impact of Social Capital on Sustained Participation in Open Source. In: *International Conference on Software Engineering*. IEEE (**ACM SIGSOFT Distinguished Paper Award**).

Herrmann, T., **Nolte**, **A.**, & Prilla, M. (2016). Socio-technical Process Design—The Case of Coordinated Service Delivery for Elderly People. In: *Blurring the Boundaries Through Digital Innovation* (pp. 217-229). Springer (**Special award Sandro D'Atri**).

Technical report

**Nolte, A.**, Pe-Than, E. P. P., Affia, A. O., Chaihirunkarn, C., Filippova, A., Kalyanasundaram, A., Medina Angarita, M. A., Trainer, E., & Herbsleb, J. D. (2020). How to organize a hackathon - A planning kit. *arXiv preprint arXiv:2008.08025*.

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#### **Teaching experience**

Lecturer:		
2019 – present	Human Computer Interaction (undergraduate)	University of Tartu
2018 – present	Human Computer Interaction (graduate)	University of Tartu
2018 – present	Digital Product Management Industry Project (graduate)	University of Tartu
2018 – present	Digital Product Design Introductory Project (graduate)	University of Tartu
2017	Implementation of information systems (undergraduate)	University of Pittsburgh
2014 - 2016	Process management and innovation (graduate)	Ruhr-Universität Bochum
Co-lecturer:		
2014 - 2015	Project management (undergraduate)	Ruhr- Universität Bochum

Seminars and individual lectures:

2019 "Qualitative Research - The Interview" for the course "Research in Educational Technology"

(graduate) University of Tartu

Ruhr- Universität Bochum

Ruhr- Universität Bochum

2013 – 2014 "Subject-Driven Role-Guided Externalization of Organizational Models" for the SURGEOM

ERASMUS summer school JKU Linz

Online tutor:

2015

2015

2016 Information management (graduate) EURO-FH University of Applied Sciences
2016 Business engineering (graduate) EURO-FH University of Applied Sciences

## Student supervision (PhD and master level)

Software engineering (undergraduate)

Groupware and knowledge management (graduate)

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	2018 – present	Maria Angelica Medina Angarita – PhD, University of Tartu, Estonia	
	2018 – present	Abasi-Amefon Obot Affia – PhD, University of Tartu, Estonia	
	2021	Andrew Bennett (Master, University of Tartu, Estonia), Ahmed Samir Imam Mahmoud (Master, University of Tartu, Estonia), Ayaz Karimov (Master, University of Tartu, Estonia), Kateryna Kubrak (Master, University of Tartu, Estonia), Kristina Meister (Master, University of Tartu, Estonia), Katrin Shuyler (Master, University of Tartu, Estonia), Tähe-Kai Tillo (Master, University of Tartu, Estonia), Abdul Wahab (Master, ongoing, University of Tartu, Estonia)	
	2020	Alar Leemet (Master, University of Tartu, Estonia), Timo Soiunen (Master, University of Tartu, Estonia)	
	2019	Sofiya Demchuk (Master, University of Tartu, Estonia), Karl-Martin Uiga (Master, University of Tartu, Estonia)	
	2016	Malte Brokkötter (Master, Ruhr- Universität Bochum, Germany), Isabella Rüsing (Master, Ruhr- Universität Bochum, Germany)	
	2015	Darius Wolodzko (Master, Ruhr- Universität Bochum, Germany)	

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## **Professional services**

Committees:	
2022	ACM International Conference on Supporting Group Work (associate chair)
2021	18 <sup>th</sup> Conference on Mining Software Repositories (hackathon track co-chair)
2021	International Conference on Collaboration Technologies and Social Computing (conference co-
	chair)
2021	6 <sup>th</sup> International Conference on Game Jams, Hackathons, and Game Creation Events (program committee)
2021	7 <sup>th</sup> Workshop on Socio-Technical Perspective in IS development @ CAiSE (program chair)
2020	25 <sup>th</sup> International Conference on Collaboration Technologies and Social Computing (program co-
	chair)
2020	28 <sup>th</sup> European Conference on Information Systems (program committee)
2020	15 <sup>th</sup> International Conference on Global Software Engineering (program committee)
2020	6th Workshop on Socio-Technical Perspective in IS development @ CAiSE (program chair)
2020	12 <sup>th</sup> International Conference on Subject-Oriented Business Process Management (program committee)
2019	27 <sup>th</sup> European Conference on Information Systems (program committee)
2019	27 <sup>th</sup> ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (registration chair)
2019	25 <sup>th</sup> International Conference on Collaboration Technologies and Social Computing (program committee)
2019	14 <sup>th</sup> International Conference on Global Software Engineering (program committee)
2019	20 <sup>th</sup> Conference on Business Process Modeling, Development and Support (program committee)
2019	11 <sup>th</sup> International Conference on Subject-Oriented Business Process Management (program committee)
2019	5 <sup>th</sup> Workshop on Socio-Technical Perspective in IS development @ ECIS (program committee)
2019	International Workshop on Software-intensive Business 2019: Start-ups, Platforms and
2010	Ecosystems @ ESEC/FSE (program committee)
2018	ACM Conference on Supporting Groupwork (program committee)
2018	26th European Conference on Information Systems (program committee)
2018	30 <sup>th</sup> International Conference on Advanced Information Systems Engineering (social media chair)
2018	13 <sup>th</sup> International Conference on Global Software Engineering (program committee)
2018	10 <sup>th</sup> International Conference on Subject-Oriented Business Process Management (program committee)
2018	2 <sup>nd</sup> Workshop on Hacking and Making at Time-Bounded Events: Current Trends and Next Steps
	in Research and Event Design @ CHI (organizer)
2018	4 <sup>th</sup> Workshop on Socio-Technical Perspective in IS development @ CAiSE (program committee)
2017	Track on A sociotechnical approach for 21st century problems @ ECIS (associate editor)
2017	12 <sup>th</sup> International Conference on Global Software Engineering (program committee)
2017	3rd Workshop on Socio-Technical Perspective in IS development @ CAiSE (program committee)
2016	11 <sup>th</sup> International Conference on Global Software Engineering
2015	(publicity chair and program committee) Workshop on Collaboration Meets Interaction Surfaces @ ITS (program committee)
Reviewer:	
Journals	Business Information Systems Engineering (BISE), IEEE Software, Group Decision and
Conferences	Negotiation, Journal of Business Analytics, Journal of Systems and Software, Software and Systems Modeling, Complex Systems Informatics and Modeling Quarterly ACM Conference on Human Factors in Computing Systems (CHI), ACM Conference on Computer-Supported Cooperative Work (CSCW), ACM International Conference on Supporting Group Work (Group), Conference on Collaboration Technologies and Social Computing (CollabTech), Mining Software Repositories (MSR), IEEE International Conference on Global
	Software Engineering (ICGSE), International Conference on Information Systems (ICIS), European Conference on Information Systems (ECIS)

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## Invited talks and panels

2021	Panel on Student Competitions at the ACM Practice & Experience in Advanced Research Computing (PEARC) conference (19.07. – 22.07., <a href="https://pearc.acm.org/pearc21/student-program/panel-on-student-competitions/">https://pearc.acm.org/pearc21/student-program/panel-on-student-competitions/</a> ) – panelist
2020	Social aspects of computing: Supporting sustainable collaboration in hybrid settings (venia legendi) University of Tartu, Tartu, Estonia (27.01.)
2019	Hackathons – Current practice and missed opportunities University of Tennessee, Knoxville, TN, USA (15.11.)
2019	Hackathon outcomes and event design Oak Ridge National Laboratory (ORNL), Oak Ridge, TN, USA (14.11.)
2019	Hackathons – Current practice and missed opportunities IEEE Estonia Section Summer Seminar 2019, Roosta, Estonia (22.08.)
2019	Hackathons – Current practice and missed opportunities Johannes Kepler University Linz, Linz, Austria (23.05.)
2018	Designing hackathons with a purpose IEEE Estonia Section Summer Seminar 2018, Jäneda, Estonia (20.08.)
2016	Supporting sustained collaboration over time – A socio-technical approach University of Missouri, Columbia, MO, USA (28.10.)
2015	Collaboration on and interaction with models of socio-technical processes Middlesex University, London, UK (03.11.)

### **Academic self-administration**

2019 – present	Erasmus+ Intereuropean Student Migration Coordinator for Partnership Agreements	
2019 – present	Head of the executive Master specialization module "Product Design and Management"	

## **Dissemination / outreach**

_	2018 – present	Co-organizer of a hackathon series in the high-performance computing community ( <a href="http://hackhpc.org/">http://hackhpc.org/</a> )
	2021	Lorentz Center workshop "Hack the Hackathon: Shaping the Future of Hackathon Research and Practice" (06.12 10.12., <a href="https://www.lorentzcenter.nl/hack-the-hackathon-shaping-the-future-of-hackathon-research-and-practice.html">https://www.lorentzcenter.nl/hack-the-hackathon-shaping-the-future-of-hackathon-research-and-practice.html</a> ) – co-organizer
	2021	Interview with Techable blog on the evolution of hackathons during the COVID crisis ( <a href="https://techable.jp/archives/155860">https://techable.jp/archives/155860</a> )
	2020	World of Code Hackathon, online (14.11. – 05.12.) – co-organizer and facilitator
	2020	Cybersecurity Hackathon, online (23.10. – 25.10.) – co-organizer and mentor
	2020	Hello Future_ hackathon, USA and Arabat, Syria (23.05. – 30.05.) – juror
	2020	The Global Hack, online (09.04. – 12.04.) – mentor
	2019	World of Code Hackathon, Pittsburgh, PA, USA (01.11. – 03.11.) – co-organizer and facilitator
	2019	Cybersecurity Hackathon, Tartu, Estonia (11.10. – 13.10.) – co-organizer and mentor

## Languages

German – native language

English – speak fluently and read/write with high proficiency (C2)

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