Alexander Nolte

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email: <u>alexander.nolte@ut.ee</u>

web: <u>alexandernolte.github.io</u>

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)

1999 – 2008 TU Dortmund University, Department of Computer Science

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

| 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 (https://hackathon-planning-kit.org/) |
|------|--|
| 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 (https://rulemining.org/) |

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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

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

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? (pp. 68-79). In: International Conference on Mining Software Repositories.

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., Magqi, 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).

reports

Workshops and 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.

> Nolte, A. (2019). Touched by the Hackathon: A Study on the Connection between Hackathon Participants and Start-Up Founders. In: International Workshop on Software-intensive Business 2019: Start-ups, Ecosystems and Platforms (pp. 31-36). ACM.

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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 |
| 2015 | Software engineering (undergraduate) | Ruhr- Universität Bochum |
| 2015 | Groupware and knowledge management (graduate) | Ruhr- Universität Bochum |
| Seminars and i | ndividual lectures: | |
| 2019 | "Qualitative Research - The Interview" for the course "Research in E | Educational Technology" |

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

ERASMUS summer school JKU Linz

University of Tartu

Online tutor:

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)

(graduate)

| 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) | 2018 – present | Maria Angelica Medina Angarita – PhD, University of Tartu, Estonia |
|--|----------------|--|
| 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) 2010 Malte Brokkötter (Master, Ruhr- Universität Bochum, Germany), Isabella Rüsing (Master, Ruhr- Universität Bochum, Germany) | 2018 – present | Abasi-Amefon Obot Affia – PhD, University of Tartu, Estonia |
| 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) | 2021 | 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), |
| Tartu, Estonia) 2016 Malte Brokkötter (Master, Ruhr- Universität Bochum, Germany), Isabella Rüsing (Master, Ruhr- Universität Bochum, Germany) | 2020 | · |
| Universität Bochum, Germany) | 2019 | , |
| Darius Wolodzko (Master, Ruhr- Universität Bochum, Germany) | 2016 | , |
| | 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 th Conference on Mining Software Repositories (hackathon track co-chair) |
| 2021 | International Conference on Collaboration Technologies and Social Computing (conference co- |
| | chair) |
| 2021 | 6 th International Conference on Game Jams, Hackathons, and Game Creation Events (program |
| | committee) |
| 2021 | 7 th Workshop on Socio-Technical Perspective in IS development @ CAiSE (program chair) |
| 2020 | 25 th International Conference on Collaboration Technologies and Social Computing (program co- chair) |
| 2020 | 28 th European Conference on Information Systems (program committee) |
| 2020 | 15 th International Conference on Global Software Engineering (program committee) |
| 2020 | 6th Workshop on Socio-Technical Perspective in IS development @ CAiSE (program chair) |
| 2020 | 12 th International Conference on Subject-Oriented Business Process Management (program |
| | committee) |
| 2019 | 27 th European Conference on Information Systems (program committee) |
| 2019 | 27 th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (registration chair) |
| 2019 | 25 th International Conference on Collaboration Technologies and Social Computing (program committee) |
| 2019 | 14 th International Conference on Global Software Engineering (program committee) |
| 2019 | 20 th Conference on Business Process Modeling, Development and Support (program committee) |
| 2019 | 11th International Conference on Subject-Oriented Business Process Management (program |
| | committee) |
| 2019 | 5 th Workshop on Socio-Technical Perspective in IS development @ ECIS (program committee) |
| 2018 | International Workshop on Software-intensive Business 2019: Start-ups, Platforms and Ecosystems @ ESEC/FSE (program committee) |
| 2018 | ACM Conference on Supporting Groupwork (program committee) |
| 2018 | 26 th European Conference on Information Systems (program committee) |
| 2018 | 30 th International Conference on Advanced Information Systems Engineering (social media chair) |
| 2018 | 13 th International Conference on Global Software Engineering (program committee) |
| 2018 | 10 th International Conference on Subject-Oriented Business Process Management (program committee) |
| 2018 | 2 nd Workshop on Hacking and Making at Time-Bounded Events: Current Trends and Next Steps |
| | in Research and Event Design @ CHI (organizer) |
| 2018 | 4th 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 th International Conference on Global Software Engineering (program committee) |
| 2017 | 3 rd Workshop on Socio-Technical Perspective in IS development @ CAiSE (program committee) |
| 2016 | 11 th International Conference on Global Software Engineering |
| 2015 | (publicity chair and program committee) Workshop on Collaboration Meets Interaction Surfaces @ ITS (program committee) |
| Reviewer: | The months of the contract of |
| | |
| Journals | Business Information Systems Engineering (BISE), IEEE Software, Group Decision and Negotiation, Journal of Business Analytics, Journal of Systems and Software, Software and |
| Conferences | 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

| 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" |

Non-academic activities / outreach

| _ | 2021 | Interview with Techable blog on the evolution of hackathons during the COVID crisis (https://techable.jp/archives/155860) | |
|---|----------------|---|--|
| | 2018 – present | sent Co-organizer of a hackathon series in the high-performance computing community (http://hackhpc.org/) | |
| | 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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