Roxane Koitz-Hristov

Curriculum Vitae

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Personal Information

Name	Roxane Koitz-Hristov
Date of Birth	October 31st, 1987
Academic Degree	Dipl.-Ing. Dipl.-Ing. Dr.techn.
Place of Birth	Graz, Austria
Citizenship	Austria

Education

2014–2018 Ph.D. Computer Science (passed with distinction), Graz University of Technology, Graz, Austria.
Ph.D. Thesis: From Theory to Practice: Abductive Model-based Diagnosis and its Industrial Application
Supervisor: Franz Wotawa, Graz University of Technology, Graz, Austria
External Reviewer: Johan de Kleer, Palo Alto Research Center, Palo Alto, U.S.A.

2013–2016 Master of Science in Computer Science (passed with distinction), Graz University of Technology, Graz, Austria.
Master's Thesis: Formula Composition and Manipulation in Educational Programming Languages for Children and Teenagers

2011–2012 Exchange Student in Computer Science – International Student Exchange Program, Western Illinois University, Macomb, Illinois, USA.

2010–2013 Master of Science in Software Development and Business Management (passed with distinction), Graz University of Technology, Graz, Austria.
Master's Thesis: Acceptance of Location Based Services in the Retail Environment

2006–2010 Bachelor of Science in Software Development and Business Management, Graz University of Technology, Graz, Austria.
Bachelor's Thesis: Virtual Tutoring System for the Cost Estimation of Software Projects

1998–2006 Grammar School, Sacré Coeur, Graz, Austria.

1994–1998 Elementary School, Sacré Coeur, Graz, Austria.

Experience

Work Experience

2018–present
Project Assistant at the Institute for Software Technology,
Graz University of Technology, Graz, Austria.
- Research fields: Model-based Diagnosis, Artificial Intelligence, (Usability, CSed)
- Teaching at Graz University of Technology and Campus02/FH Joanneum

2015–2018
University Assistant at the Institute for Software Technology,
Graz University of Technology, Graz, Austria.
- Research fields: Model-based Diagnosis, Artificial Intelligence
- Involvement in different research projects such as AMOR (Applied Model-Based Reasoning), EXPERT, 3CCar.
- Organisation of the HRSM cooperation project Lehrverbund Süd (LVIS)
- Teaching at Graz University of Technology

2014–2015
Project Assistant at the Institute for Software Technology,
Graz University of Technology, Graz, Austria.
- Project AMOR (Applied Model-Based Reasoning)
- Funded by The Austrian Research Promotion Agency (FFG)

2009–2011
Teaching Assistant at the Institute for Software Technology,
Graz University of Technology, Graz, Austria.
- Course: Software Maintenance

2008
Quality Assurance (Internship), EA – Electronics Arts, Inc., Madrid, Spain.
- Responsible for the quality assurance for several games
- Testing games in regard to the language quality

2007
"Automation & Drive" (Internship), Knapp Logisitk Automation GmbH, Graz, Austria.
- Implementation of various Visual Basic for Applications projects

2006–2009
General Office Work (Marginal Employment), Baumgartner & Grienschgl GmbH, Graz, Austria.

Teaching Experience

2015–2018
Software Maintenance (Lecture/Practical 3),
Graz University of Technology, Graz, Austria.
- WS 2018/2019 Lecturer
- WS 2015/2016, WS 2016/2017, WS 2017/2018 Co-Lecturer

2016–2018
Compiler Construction (Design practical 1),
Graz University of Technology, Graz, Austria.
- SS 2018 Lecturer
- SS 2016, SS 2017 Co-Lecturer

2018
Compiler Construction (Lecture 2),
Graz University of Technology, Graz, Austria.
- SS 2018 Lecturer

2018
Modelling Technical Systems (Lecture 2/ Practical 1),
Graz University of Technology, Graz, Austria.
- SS 2018 Co-Lecturer

2018
Principles of Informatics (Lecture 2), Campus02 and FH Joanneum, Graz, Austria.
- WS 2018/2019 Lecturer

2018
Principles of Operating Systems (Lecture/Practical 3), Campus02 and FH Joanneum, Graz, Austria.
- WS 2018/2019 Lecturer

2018
The Twin Peaks Model: Software Architecture and Lifecycle (Value-Network Sued - IT enabled Eco Systems),
Graz University of Technology, Graz, Austria.
- SS 2018 Co-Lecturer

2018 Data as a Service: Technologies and Architectures (Value-Network Sued - IT enabled Eco Systems),
Graz University of Technology, Graz, Austria.
- SS 2018 Co-Lecturer

2017–2018 Co-Supervised Theses,
Graz University of Technology, Graz, Austria.
- Johannes Lüftenegger - Master's Thesis (completed 2018): Development and Evaluation of a User Interface Concept for an Industrial Wind Turbine Diagnosis Application
- Hannes Unterweger - Bachelor's Thesis (ongoing): Empirical Evaluation of Tools for Program Analysis
- Lukas Stracke - Bachelor's Thesis (ongoing): Code Similarity Detection with Program Dependency Graphs
- Markus Doler - Bachelor's Thesis (ongoing): Comparison of Divide-And-Conquer Strategies in the Context of Explanation Generation
- Alexandra Taupe - Bachelor's Thesis (ongoing): Comparison of Slicing Techniques Beyond the Usual Suspects

Conference Organisation Experience

2018–2019 Publication Chair IEA/AIE 2019, 32nd International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems, Graz, Austria.

2018–2019 Co-Chair on Special Track on Immersive and Engaging Educational Experiences, 5th Annual International Conference of the Immersive Learning Research Network, London, UK.

2018–2019 Special Tracks Co-Chair iLRN 2019, 5th Annual International Conference of the Immersive Learning Research Network, London, UK.

2017 Local Support DX2017, 28th Edition of the International Workshop on Diagnosis 2018, Brescia, Italy.

2015 Publications Co-Chair iLRN 2015 Conference, 1st immersive Learning Research Network Conference, Prague, Czech Republic.

2015 Local Support ICST2015, 8th International Conference on Software Testing, Verification and Validation, Graz, Austria.

2014 Publicity and Public Relations Chair EiED 2014, 4th European Immersive Education Summit, Vienna, Austria.

2014 Local Support DX2014, 25th Edition of the International Workshop on Diagnosis 2014, Graz, Austria.

Other Experiences

2013 Catrobat Project – UX Coordinator, Catrobat Projekt, Graz, Austria.

2013 Volunteer at UX Day Graz 2013, UX Day Graz 2013 Graz University of Technology, Graz, Austria.

2009 Volunteer at RoboCup 2009, RoboCup 2009 Graz University of Technology, Graz, Austria.

2008–2013 Student Union Computer Science and Software Development and Business Management (BIS), Member.

Seminars and Workshops

2015–2018 Teaching,
Graz University of Technology, Graz, Austria.

- 2018 Teach, Present and Publish: English for Academic Purposes
- 2017 Motivational Teaching: Fundamentals and Tools (Motivierende Lehre: Grundlagen und Tools)
- 2017 Teaching at TU Graz (Lehre an der TU Graz)
- 2016 Didactics 3: Teaching Behaviour in Academic Education (Didaktik 3: Lehrverhalten im akademischen Bildungsbereich)
- 2015 Didactics 2: Teaching in Academic Education (Didaktik 2: Durchführen von Lehrveranstaltungen im akademischen Bildungsbereich)
- 2015 Didactics 1: Fundamentals of Teaching and Learning in Academic Education (Didaktik 1: Grundlagen des Lehrens und Lernens im akademischen Bildungsbereich)
- 2015 Teaching in English - Introduction

2017–2018 Leadership and Delegation,
Graz University of Technology, Graz, Austria.

- 2018 Leadership and Management in Practice (Leadership und Management in der Praxis)
- 2017 Psychology of Leadership and Motivating: Basics (Psychologie des Führens und Motivierens: Grundlagen)
- 2017 Leadership and Delegation (Führen und Delegieren)

2014–2017 Research and Miscellaneous,
Graz University of Technology, Graz, Austria.

- 2017 Introduction to Business Planning for Scientists (Einführung in die Businessplanung für Wissenschafterinnen und Wissenschafter)
- 2016 Rhetoric for Conversations and Meetings: Argumentation, Conversation Techniques, Moderation (Rhetorik für Gespräche und Meetings: Argumentation, Gesprächstechniken, Moderation)
- 2015 More Effective Scientific Writing in English
- 2014 Effective Scientific Writing in English
- 2014 Academic Writing

Languages

German – Native Tongue

English – Full Professional Proficiency

2011–2012 Studied a year abroad in the United States of America, Western Illinois University, Macomb, Illinois, United Satets of America.

2010 TOEFL iBT (118/120 points), ETS, Graz, Austria.
Test of English as a Foreign Language

French – Elementary Proficiency

2004 DELF (Diplôme d´Etudes en Langue Française) B1 certificate (68/100 Punkte), Institut Culturel Franco-Autrichien, Graz, Austria.

Publications

Publications

[1] R. Koitz-Hristov and F. Wotawa. Applying algorithm selection to abductive diagnostic reasoning. Applied Intelligence, page 1–19, 5 2018.

[2] F. Wotawa, B. Peischl, and R. Koitz. Diagnosis as a service, pages 557–567. Springer Berlin - Heidelberg, 2018.

[3] R. Koitz-Hristov and F. Wotawa. On the Superiority of Conflict-Driven Search in MUS Enumeration, In Proceedings of the International Workshop on Principles of Diagnosis, 2018.

[4] R. Koitz, F. Wotawa, J. Lüftenegger, C. Gray, and F. Langmayr. Wind Turbine Fault Localization: A Practical Application of Model-Based Diagnosis, pages 17–43. Springer International Publishing AG, Switzerland, 2018.

[5] R. Koitz, J. Lüftenegger, and F. Wotawa. Model-Based Diagnosis in Practice: Interaction Design of an Integrated Diagnosis Application for Industrial Wind Turbines, pages 440–445. Springer International Publishing AG, Switzerland, 2017.

[6] R. Koitz and F. Wotawa. Extending The Modeling Framework For Abductive Diagnosis Beyond Horn Clauses , International Workshop on Principles of Diagnosis, 2017.

[7] R. Koitz and F. Wotawa. On Structural Properties to Improve FMEA-Based Abductive Diagnosis. In Proceedings of the Workshop on Knowledge-based Techniques for Problem Solving and Reasoning, Volume Vol-1648. CEUR WS Proceedings, 7 2016.

[8] R. Koitz and F. Wotawa. Integration of Failure Assessments into the Diagnostic Process. In Proceedings of the Annual Conference of the Prognostics and Health Management Society 2016, pages 124–135, 2016.

[9] R. Koitz and F. Wotawa. Improving Abductive Diagnosis through Structural Features: A Meta-Approach. In Proceedings of the International Workshop on Defeasible and Ampliative Reasoning (DARe-16), volume Vol-1626. CEUR WS Proceedings, 9 2016.

[10] R. Koitz and F. Wotawa. Exploiting Structural Metrics in FMEA-Based Abductive Diagnosis. In Proceedings of the 27th International Workshop on Principles of Diagnosis (DX), pages 1–7, 2016.

[11] R. Koitz. Formula Composition and Manipulation in Educational Programming Languages for Children and Teenagers. Master thesis, 4 2016.

[12] R. Koitz and F. Wotawa. SAT-Based Abductive Diagnosis. In Proceedings of the 26th International Workshop on Principles of Diagnosis (DX), pages 167–175., 2015.

[13] R. Koitz and F. Wotawa. On the Feasibility of Abductive Diagnosis for Practical Applications. In Proceedings of the 9th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, pages 410–415., 2015.

[14] R. Koitz and F. Wotawa. From Theory to Practice: Model-Based Diagnosis in Industrial Applications. In Proceedings of the Annual Conference of the PHM Society (PHM), pages 197–205., 2015.

[15] R. Koitz and F. Wotawa. Finding Explanations: An Empirical Evaluation of Abductive Diagnosis Algorithms. In Proceedings of the DARe-15 International Workshop on Defeasible and Ampliative Reasoning, pages 1–7., 2015. International Joint Conference on Artificial Intelligence (IJCAI 2015).

[16] R. Koitz and F. Wotawa. Diagnosis of Technical Systems. In Proceedings of the International Joint Conference on Artificial Intelligence 2015, pages 4375–4376, 2015.

[17] C. Gray, R. Koitz, S. Psutka, and F. Wotawa. An Abductive Diagnosis and Modeling Concept for Wind Power Plants. In Proceedings of the 9th IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes, pages 1–6., 2015.

[18] R. Koitz and W. Slany. Empirical Comparison of Visual to Hybrid Formula Manipulation in Educational Programming Languages for Teenagers. In PLATEAU '14: Proceedings of the 5th Workshop on Evaluation and Usability of Programming Languages and Tools, pages 21–30, United States, 2014. Association of Computing Machinery.

[19] C. Gray, R. Koitz, S. Psutka, and F. Wotawa. An Abductive Diagnosis and Modeling Concept for Wind Power Plants. In International Workshop on Principles of Diagnosis, pages 404–409., 2014.

[20] I. Uitz and R. Koitz. Consumer Acceptance of Location Based Services in the Retail Environment. International Journal of Advanced Computer Science and Applications (IJACSA), 2013. U.S ISSN : 2156-5570 (Online), U.S ISSN : 2158-107X (Print).

[21] R. Koitz and I. Uitz. The Factor Usability on Location Based Services in the Retail Environment. In Proceedings of the 2013 Summer Global Business Conference, 2013, pages 244–252., 2013.

[22] R. Koitz. Akzeptanz von Location Based Services im Einzelhandel. Master thesis, 2013.