Curriculum Vitae Univ.-Prof. Dr. Ruth Breu

Personal Data

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Education and Employment

Education

1999/07/07	Habilitation at Technische Universität München (Venia Docendi)
1991/06/07	PhD degree at University of Passau (Dr.rer.nat.)
1983 – 1988	Computer Science Studies, University of Passau (Dipl.Inf.)

Employment

Since 10/2002	Full Professor at the University of Innsbruck, Institute of Computer Science
1998 – 2002	Freelance Consultant in the area of systems analysis
1999 – 2002/1990 – 1991	Research Assistant at Technische Universität München
1995 – 1999	Habilitation Fellowship of the German Research Foundation
1991 – 1995	Parental leave and Wiedereinstiegsstipendium Bayerisches Hochschulsonderprogramm
1988 – 1990	Research Assistant at Universität Passau (Prof. Dr. Martin Wirsing)

Management Skills

Since 2013//2004 – 2007	Head of the Institute of Computer Science, University of Innsbruck
Since 2009	Head of Laura Bassi Centre of Expertise QE LaB, (www.qe-lab.at)
2012	Co-Founder of QE LaB Business Services GmbH (www.qe-lab.com)
2003	Co-Founder of arctis Softwaretechnologie GmbH (www.arctis.at)

Expertise (main areas)

Model-Based Quality Management

Security Engineering

Enterprise Architecture Management

Model Engineering

Five Most Important Third Party Funded Projects

SALSA	Living Safety&Security Cases for Cyber-Physical Systems Certification, funded by Österreichische Forschungsförderungsgesellschaft, Partners: TTTech Computertechnik AG, fortiss GmbH, ITSEC GmbH, 2016-2019
txtureSA	Situation-Aware IT Asset Management, FWF Project, 2016-2019
QE LaB	Quality Engineering Laura Bassi Lab - Living Models for Open Systems, funded by Bundesministerium für Wissenschaft, Forschung und Wirtschaft, Infineon Technologies IT-Services GmbH, ITH icoserve technology for healthcare GmbH (Siemens), Porsche Informatik Gesellschaft m.b.H., Kapsch CarrierCom AG, Swiss Life AG, Comarch Software und Beratung AG, iteratec GmbH, phion AG, ITSEC GmbH, 2009-2016
MOBSTECO	Model-Based Security Testing of Clouds, FWF Project, 2013-2016

PoSecCo	Policy and Security Configuration Management, EU-IST Integrated Project, Partners: SAP (D), Berner Fachhochschule (CH), Politecnico di Torino (I), Technische Universität Eindhoven (NL), Universita degli studi di Bergamo (I), Thales (F), IBM Research (CH), Atos Origin (E), Deloitte (F), 2010-2013

Five Most Important Scientific Awards and Honors

- Science Award of the State of Tyrol 2015
- Scientific Head of Quality Engineering Laura Bassi Centre of Expertise (since 2009)
- Member of Board of FWF, the Austrian Science Fund (since 2011)
- Best Tools Track Paper Award EASE 2016
- Best Paper Award of SoSym Journal (invitation to presentation at MODELS 2015 conference), 2015

Five Most Important Editorships, Review Activities and Conference Chairing Activities

- Member of Editorial Board, International Journal on Software and Systems Modeling SoSyM, Springer
- Steering Committee Member of ACM/IEEE International Conference on Model-Driven Engineering Languages and Systems MODELS
- Reviewer of IST EU-FP7 project MIDAS, 2013-2015
- 15th ACM/IEEE International Conference on Model-Driven Engineering Languages and Systems MODELS 2012, General Co-Chair, 2012
- 16th ACM Symposium on Access Control Models and Technologies SACMAT 2011, General Chair, 2011

Five Most Important Invited Talks:

- "Wege aus der Safety und Security Falle", Keynote at safe.tech 2016

- "Living Security", Keynote at CHIST-ERA Conference, Istanbul (2014)

- "From Model-Driven Security to Living Security Models", invited talk at Nessos Network of Excellence Workshop, Malaga (2013)

- "Living Security – Concepts for Collaborative and Continuous Security Requirements Management", invited talk at Kolloquium IBM Research, 2013

- "Security Challenges of Trans-Institutional Healthcare Networks" at Workshop New Directions in Software Technology NDIST 2010, St. John, US Virgin Islands, USA (2010)

Ten Selected Publications

Farwick, M. and Schweda, Ch. and Breu, R. and Hanschke, I. A situational Method for Semi-automated Enterprise Architecture Documentation. In: Software & Systems Modeling 15(2):397-426 (2016)

Felderer, M. and Zech, P. and Breu, R. and Büchler, M. and Pretschner, A. Model-based security testing: a taxonomy and systematic classification. In: Journal of Software: Testing, Verification and Reliability, Volume 26 (2), 2016, 119-148

Häser, F., Felderer, M., Breu, R: Is business domain language support beneficial for creating test case specifications: A controlled experiment. Information & Software Technology 79: 52-62, 2016

Christian Sillaber, Ruth Breu: Using Business Process Model Awareness to improve Stakeholder Participation in Information Systems Security Risk Management Processes. Wirtschaftsinformatik 2015: 1177-1190

Christian Sillaber, Ruth Breu: Identifying Blind Spots in IS Security Risk Management Processes Using Qualitative Model Analysis. HCI (22) 2015: 252-259

Thomas Trojer, Matthias Farwick, Martin Häusler, Ruth Breu: Living Modeling of IT Architectures: Challenges and Solutions. Software, Services, and Systems 2015: 458-474

Breu, R. and Kuntzmann-Combelles, A. and Felderer, M. New Perspectives on Software Quality. In: IEEE Software, Volume 31 (1), 2014, pp. 32-38

Breu, R. Ten Principles for Living Models - A Manifesto of Change-Driven Software Engineering. In: Proc. of the 4th Intl. Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2010), February 15-18, 2010, Krakow, Poland. IEEE Computer Society, 2010, pp. 1-8

Hafner, M. and Breu, R. SOA Security - Engineering Security-critical Inter-organizational Applications. Springer, 2008.

Breu R. and Popp G. and Alam M.: Model based development of access policies. International Journal on Software Tools for Technology Transfer (STTT) 9 (5-6): 457-470, Springer, 2007