

## Publications of Software AG Research

Title	Keywords	Authors	Published in	Year
Efficient and fast monitoring and disruption management for a pressure diecast system	Monitoring, disruption Management	Y. Hegenbarth, Th. Bartsch, G. Ristow	it - Information Technology, Band 60, Heft 3, Seiten 165–171, ISSN (Online) 2196-7032, ISSN (Print) 1611-2776	2018
Flexible IT platform for synchronizing energy demands with volatile markets	Smart energy, platform	P. Schott, R. Ahrens, D. Bauer, F. Hering, R. Keller, J. Pullmann, D. Schel, J. Schimmelpfennig, P. Simon, Th. Weber, E. Abele, Th. Bauernhansl, G. Fridgen, M. Jarke, G. Reinhart	it - Information Technology, Band 60, Heft 3, Seiten 155–164, ISSN (Online) 2196-7032, ISSN (Print) 1611-2776	2018
SYNCHRO-NET: a powerful and innovative synchro-modal supply chain eco-NET	Smart Logistics, synchro-model transport, simulation	Denise Holfeld, Chiara Iorfida, Mikal Koya, Daniele Manerba, Julian Stephens, Roberto Tadei, Frank Werner	Proceedings of 7th Transport Research Arena TRA 2018, April 16-19, 2018, Vienna, Austria	2018
Studieren und Probieren	Learning, Study	Harald Schöning	S. Ladel, J. Knopf, A. Weinberger (Hrsg.): Digitalisierung und Bildung, Springer VS, Wiesbaden	2018
The Role of Immersive Virtual Reality in Individual Learning	Virtual Reality, Learning	Henrik Kampling	51st Hawaii International Conference on System Sciences (HICSS), January 2-6, 2018	2018
Big Smart Data – Intelligent Operations, Analysis und Process Alignment	Big Data, Smart Data, Business Process	Harald Schöning, Marc Dorchain	Vogel-Heuser, Bauernhansl, ten Hompel (Hrsg.): Handbuch Industrie 4.0 Bd. 2 Automatisierung, 2. Auflage, Springer Vieweg	2017
Smart Big Data in der industriellen Fertigung Industrie 4.0	Big Data, Smart Data, Industrie 4.0	Yvonne Hegenbarth, Gerald Ristow	B. Mitschang et al. (Hrsg.): Datenbanksysteme für Business, Technologie und Web (BTW 2017), Lecture Notes in Informatics (LNI), Gesellschaft für Informatik, Bonn	2017
Learning business process management in an interactive and emotion sensitive fashion	Learning, Business Process Management, emotion recognition	Harald Schöning	Mühlhäuser, M., Zehbold, C. (Hrsg): Proceedings of the 9th conference on Subject-Oriented Business Process Management, Darmstadt	2017

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PrEstoCloud: Proactive Cloud Resources Management at the Edge for Efficient Real-Time Big Data	Cloud, Big Data, Real-Time	Yiannis Verginadis, Iyad Alshabani, Gregoris Mentzas and Nenad Stojanovic	Processing, presented at the 7th International Conference on Cloud Computing and Service Science in Porto, Portugal	2017
Seamless task offloading on multi-clouds and edge resources: An experiment	Cloud computing, edge computing	Andreas Tsagkaropoulos, Yiannis Verginadis, Dimitris Apostolou and Gregoris Mentzas	presented at the 8th IEEE International Conference on Information, Intelligence, Systems and Applications, in Larnaca, Cyprus, 28-30 August 2017	2017
Wide Area Video Surveillance Based on Edge and Fog Computing Concept	Edge computing, fog computing	Georgios Kioumourtzis, Michalis Skitsas, Nikolaos Zotos and Anargyros Sideris	presented at the 8th IEEE International Conference on Information, Intelligence, Systems and Applications, in Larnaca, Cyprus, 28-30 August 2017	2017
A proposal of decentralised architecture for optimised operations in manufacturing ecosystem collaboration	decentralized platforms, process optimization, simulation, multi-layer platform	Pavlos Eirinakis, Jorge Buenabad-Chavez, Rosanna Fornasiero, Haluk Gokmen, Julien-Etienne Mascolo, Ioannis Mourtos, Sven Spieckermann, Vasilis Tountopoulos, Frank Werner, Robert Woitsch	Proceedings: Working Conference on Virtual Enterprises, PRO-VE 2017, 18-20 Sep 2017, Vicenza, Italy	2017
10 Principles of Digital Transformation	Digital transformation	Dr. Stefan Sigg, Dr. Harald Schöning	<a href="https://resources.softwareag.com/digital-transformation/ten-principles-for-digital-transformation-white-paper">https://resources.softwareag.com/digital-transformation/ten-principles-for-digital-transformation-white-paper</a>	2017
Digitally Green: EU-funded project Synchro-NET to optimize planning and manage real-time variations	Reduction of hinterland transport costs, strong decrease of CO2 emissions for shipping, land-based transport, modal shift to greener modes	Santiago Blasco, Nicoletta Garzoni, Pedro Perez, Julian Stephens, Frank Werner	HAFEN + TRANSPORT INTERMODAL, Schiffahrt Hafen Bahn und Technik, Vol 5, 2017	2017
Short Guide to Gamification - Findings of the Reveal Project and Practical Application in Enterprise Online Communities	Gamification, enterprise communities, Reveal, ARIS	Marc Dorchain, Gabriele Strobel and Martin Scheid	Available at SSRN: <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2869679">https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2869679</a>	2016
Efficient failure management in manufacturing systems through the implementation of Big Data technologies	BigPro, Big Data, Industrie 4.0, Failure Management	Thomas Gartzten, Christina Reuter, Felix Brambring, Felix Jordan and Felix Basse (RWTH Aachen University)	Available at ResearchGate: <a href="https://www.researchgate.net/publication/309618941_Efficient_failure_management_in_manufacturing_systems_through_the_implementation_of_Big_Data_technologies">https://www.researchgate.net/publication/309618941_Efficient_failure_management_in_manufacturing_systems_through_the_implementation_of_Big_Data_technologies</a>	2016

Deja Vu: Wieder einmal NoSQL Datenbanken	NoSQL, Datenbanken	Harald Schöning	Zeitschrift: HMD Praxis der Wirtschaftsinformatik ISSN: 1436-3011 Verlag: Springer Fachmedien Wiesbaden Verlagsort: Wiesbaden	2016
Unterstützung der Störungserkennung in der industriellen Fertigung durch eine echtzeitfähige Big Data-Plattform	Industrie 4.0, IoT, CEP, Apama, Data Mining	Gerald H. Ristow und Yvonne Hegenbarth	Ralf-Christian Härting (Hrsg.): Industrie 4.0 und Digitalisierung – Innovative Geschäftsmodelle wagen! ISBN: 978-3-8391-3735-2 Verlag: BoD - Books on Demand Verlagsort: Norderstedt	2016
Proactive Disruption Management System: How Not to Be Surprised by Upcoming Situations	Industrie 4.0, IoT, CEP, Apama, Data Mining	Suad Sejdovic, Yvonne Hegenbarth, Gerald H. Ristow and Roland Schmidt	Proceedings of the 10th ACM International Conference on Distributed and Eventbased Systems. DEBS '16, ACM, Irvine, California, S. 281–288, 2016, isbn: 978-1-4503-4021-2	2016
Modeling Complex Event Patterns in EPC-Models and Transforming them into an Executable Event Pattern Language	CEP, ARIS, APAMA, EPL	Julian Krumeich, Manuel Zapp, Dirk Mayer, Dirk Werth, and Peter Loos	Multikonferenz Wirtschaftsinformatik (MKWI) 2016 : Technische Universität Ilmenau 09. - 11. März 2016, ISBN: 978-3-86360-132-4, Verlag; Universitätsverlag Ilmenau, Verlagsort: Ilmenau	2016
Industrie 4.0	Industrie 4.0	Harald Schöning	Buch Vertrauensbasierte Führung, ISBN: 978-3-662-46232-4, Verlag: Springer Gabler, Verlagsort: Berlin Heidelberg	2016
Industrie 4.0 nur mit sicherer IT	Industrie 4.0, Sicherheit	Harald Schöning	Zeitschrift: Industrieanzeiger. ISSN: 0019-9036, Verlag: Konradin-Verlag Robert Kohlhammer GmbH, Verlagsort: Leinfelden-Echterdingen	2015

Das Konzept Industrie 4.0	Industrie 4.0	Harald Schöning	Buch Innovationsführerschaft - Credo und Praxis, ISBN: 978-3-86329-641-4, Verlag: symposion, Verlagsort: Düsseldorf	2015
IT-Sicherheit in Industrie 4.0	Industrie 4.0, Sicherheit	Harald Schöning	Buch Industrie 4.0: Ein praxisorientierter Ansatz, ISBN: 978-3-945622-01-8, Verlag: KS-Energy-Verlag Verlagsort: Berlin	2015
Vom Sensor zum Geschäftsprozess - Industrie 4.0 in der Stahlindustrie	Industrie 4.0, Geschäftsprozesse	Dietmar Gärtner, Jens Schimmelpfennig	Buch Industrie 4.0: Ein praxisorientierter Ansatz, ISBN: 978-3-945622-01-8, Verlag: KS-Energy-Verlag Verlagsort: Berlin	2015
Risk Assessment and Security Testing of Large Scale Networked Systems with RACOMAT	Risk assessment, Security testing, Incident simulation	<i>Johannes Viehmann (Fraunhofer FOKUS)</i> <i>Frank Werner (Software AG)</i>	3rd Int'l. Risk Assessment & Risk-driven Testing Workshop, Risk Assessment and Risk-Driven Testing, Third International Workshop, RISK 2015, Berlin, Germany, June 15, ISBN 978-3-319-26416-5	2015
Industrie 4.0 in Produktion, Automatisierung und Logistik, Seite 543-554	Industrie 4.0, Data Mining und Analyse, Geschäftsprozesse in I4.0	Harald Schöning, Marc Dorchain	Springer Fachmedien, Wiesbaden, ISBN: 978-3-658-04681-1	2014
Advanced Planning and Control of Manufacturing Processes in Steel Industry through Big Data Analytics: Case Study and Architecture Proposal	Big Data, Industrie 4.0	Julian Krumeich, Sven Jacobi, Jens Schimmelpfennig, Dirk Werth und Peter Loos	IEEE International Conference on Big Data, Washington DC, 27. - 30. Oktober 2014	2014
Leveraging SpatioTemporal Clustering for Participatory Urban Infrastructure Monitoring	Crowdsourcing; Spatio-temporal Clustering; Duplicate Detection; Civic Issue Tracking; Issue Ranking;	Matthias Budde, Julio De Melo Borges, Stefan Tomov, Till Riedel, Michael Beigl Karlsruhe Institute of Technology (KIT), TECO / Pervasive Computing Systems, Karlsruhe, Germany	Best Paper on the first International Conference on IoT in Urban Space (Urb-IoT 2014)	2014
Autonomic monitoring approach based on CEP and ML for Logistic of Sensitive Goods	IoT, CEP, smart logistics, machine learning	Septimiu Nechifor, Bogdan Tarnauca, Lucian Sasu, Dan Puiu, Anca Petrescu (Siemens)  Joachim Teutsch, Walter	IEEE 18th International Conference on Intelligent Engineering Systems, <a href="http://www.ines-conf.org/ines-conf/2014.html">http://www.ines-conf.org/ines-conf/2014.html</a>  <a href="http://ieeexplore.ieee.org/xpl/mostRecentIssue.js">http://ieeexplore.ieee.org/xpl/mostRecentIssue.js</a>	2014

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		Waterfeld (SAG) Florin Moldoveanu (U Brasov)	<a href="https://doi.org/10.1007/978-3-658-68976-2">p?punumber=6897628</a>	
Data Mining und Analyse	Data Mining, Industrie 4.0	Harald Schöning und Marc Dorchain	Buch: Industrie 4.0 in Produktion, Automatisierung und Logistik - Anwendung · Technologien · Migration ISBN: 978-3-658-04681-1 Verlag: Springer Fachmedien Wiesbaden Verlagsort: Wiesbaden	2014
Realizing the Predictive Enterprise through Intelligent Process Predictions based on Big Data Analytics: A Case Study and Architecture Proposal	Predictive Enterprise, BPM, CEP, Industrie 4.0	Julian Krumeich, Jens Schimmelpfennig, Dirk Werth, Peter Loos	44. Jahrestagung der Gesellschaft für Informatik (Informatik 2014), Stuttgart, 22. - 26. September 2014	2014
Vom Geschäftsmodell zum Geschäftsprozess und zurück - Konfiguration, Analyse, Transformation, Controlling.	Geschäftsmodelle für softwareindustrie, Bewertung konfigurierter Modelle	Caspar, J.; Di Valentin, C.; Maier, S.; Mayer, D.; Pussep, A.; Schief, M.	Praxis der Wirtschaftsinformatik, Heft 292	2013
Emergence as Competitive Advantage Engineering Tomorrow's Enterprise Software Systems	emergence, business process modeling, emergent enterprise software systems, interoperability, adaptability, system-of-systems, software evolution, event-based systems, service-oriented architectures	S. Frischbier, M. Gesmann, D. Mayer, A. Roth and C. Webel	Proceedings of the 14th International Conference on Enterprise Information Systems (ICEIS 2012), Wroclaw, Poland	2012
Towards a Framework for Transforming Business Models into Business Processes.	Business modell, Model transformation	Burkhart, T.; Di Valentin, C.; Vanderhaeghen, D., Werth, D.; Loos, P.	18th Americas Conference on Information Systems, August 9-11, Seattle, WA, United States. AMCIS 2012 Proceedings. American Conference on Information Systems (AMCIS-12)	2012

Business Process Management 2011 – Status quo und Zukunft Eine empirische Studie im deutschsprachigen Europa	empirische Studie, BPM	Zürcher Hochschule für Angewandte Wissenschaften  Herausgeber: Clemente Minonne Autoren: Clemente Minonne, Carlo Colicchio, Matthias Litzke, Thomas Keller		2011
Involving Business Users in the Design of Complex Event Processing Systems	Complex Event Processing (CEP), conceptual modeling language, complex events, automotive manufacturing industry	Jens Schimmelpfennig, Dirk Mayer, Philipp Walter, Christian Seel	Tagungsband der 14. GI-Fachtagung Datenbanksysteme für Business, Technologie und Web, Kaiserslautern, 2011, S. 606-615	2011
The ADiWa Project - on the Way to Just-in-Time Process Dynamics based on Events from the Internet of Things	event-based system, event processing, context awareness, dynamic business processes, internet of things	Schief, Markus ; Kuhn, Christian ; Zimmermann, Birgit ; Rösch, Philipp ; Waterfeld, Walter ; Schimmelpfennig, Jens ; Mayer, Dirk ; Maus, Heiko ; Eichler, Jörn	In: 13th International Conference on Enterprise Information Systems (ICEIS 2011), Beijing.	2011
Efficient Implementation of Interoperable Business Processes by Model Transformation.	Model transformation, BPMN	Göres, J.; Seel, C.	Paul Cunningham and Miriam Cunningham (Hrsg.): eChallenges e-2011 Conference Proceedings, Florence, Italy, October 25-28 2011	2011
Demonstrating the Application of Digital Product Memories in a Carbon Footprint Scenario	Keywords-Distributed data structures; Information browsers; Process control; Pervasive computing	Alexander Kröner, Gerrit Kahl, Lübmira Spassova, Thomas Feld, Dirk Mayer, Carsten Magerkurth, Ali Dada	Proc. of the 6th IEEE International Conference on Intelligent Environments (IE), Kuala Lumpur, Malaysia Juli 2010	2010
Conceptual Modeling of Complex Events in Industrial Business Processes	Business Process Management (BPM), Complex Event Processing (CEP), RFID, Business-IT-Alignmen, MOF	D. Mayer, J. Schimmelpfennig, C. Seel & P. Walter	In: Proceedings of 12th International Conference on the Modern Information Technology in the Innovation Processes of the industrial enterprises (MITIP), Aalborg, Denmark, August 30-31, 2010 S. 102-109	2010
Conceptual Modeling of Complex Events of the Internet of Things.	Business Process Management (BPM), Complex Event Processing (CEP), RFID, Business-IT-Alignmen. MOF	C. Seel, J. Schimmelpfennig, P. Walter, D. Mayer	Proceedings of the eChallenges 2010 conference, Warsaw, Poland, October 27-29, 2010, S.	2010

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<p>Demonstrating the Application of Digital Product Memories in a Carbon Footprint Scenario</p>	<p>Keywords-Distributed data structures; Information browsers; Process control; Pervasive computing</p>	<p>Alexander Kröner, Gerrit Kahl, Lübmira Spassova, Thomas Feld, Dirk Mayer, Carsten Magerkurth, Ali Dada</p>	<p>Proc. of the 6th IEEE International Conference on Intelligent Environments (IE), Kuala Lumpur, Malaysia Juli 2010</p>	<p>2010</p>
<p>Process follows Strategy - Plan, execute and control business processes aligned with corporate strategy</p>	<p>Performance Management, Business Process Management, Strategy Execution, Strategy Maps, Balanced Scorecard, Business Model Performance Management, Business Process Management, Strategy Execution, Strategy Maps, Balanced Scorecard, Business Model</p>	<p>Katrina Leyking</p>	<p>Information Management und Consulting 25, 4, 2010, S. 62ff.</p>	<p>2010</p>