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Born on November 4, 1979 in Bietigheim-Bissingen
(Germany)



Scientific Career

- Since 2015 Deputy Director of the Institute for Control Engineering and Manufacturing Units (ISW) of the University of Stuttgart
- 2011 Doctorate (Dr.-Ing., summa cum laude): "Conception of a functionally uniform application interface for Ethernet-based bus systems"
- Since 2010 Managing Chief Engineer at the Institute for Control Engineering and Manufacturing Units (ISW) of the University of Stuttgart
- 2009 - 2010 Head of the Department Control Engineering at the Institute for Control Engineering and Manufacturing Units (ISW) of the University of Stuttgart
- 2006 - 2009 Research Assistant at the Institute for Control Engineering and Manufacturing Units (ISW) of the University of Stuttgart in the Research Area Information and Communication Technology
- 2000 - 2006 Study of Engineering Cybernetics with emphasis on Production Engineering at the University of Stuttgart

Scholarships, Awards and Faculty Functions

- Since 2014 Member of Manuclouds Steering Committee
- Since 2013 Member of steering committee Industrie 4.0 (cyber-physical systems) at Fraunhofer IPA
- Since 2012 Deputy Head of Business Unit Electronic and Microsystems at Fraunhofer IPA
- Since 2011 Member of DFAM - German Research Association for Automation and Microelectronics
- Since 2009 Member of SERCOS Steering Committee
- Since 2008 Head of Competence centre and certification laboratory for Ethernet-based communication with SERCOS III
- Since 2008 Head of Technical Working Group for Certification of SERCOS III
- 2007 Assistance to IEC 61784 and IEC 61158

Ten most important publications

* Publications jointly together with UoA-researchers involved within this IRTG

§ Publications jointly together with USTUTT-researchers involved within this IRTG

A) Published in publication outlets with scientific quality assurance and book publications:

1. § Verl, A.; Lechler, A.; Wesner, S.; Kirstädter, A.; Schlechtendahl, J.; Schubert, L.; Meier, S.: An Approach for a Cloud-based Machine Tool Control. Procedia CIRP, 7, p. 682-687, 2013.
2. § Verl, A.; Lechler, A.; Schlechtendahl, J.: Glocalized cyber physical production systems. In Production Engineering Research and Development, Springer, 6, pp 643-649, 2012.
3. § Brecher C.; Verl A.; Lechler A.; Servos, M.: Open Control Systems – State of the Art. WGP-Annals, Production Engineering Research & Development, 4, p. 247-254, 2010.
4. § Schlechtendahl, J.; Keinert, M.; Kretschmer, F.; Lechler, A.; Verl, A.: Making existing production systems Industry 4.0-ready. Production Engineering, 9, p. 143-148, 2015.
5. § Schlechtendahl, J.; Kretschmer, F.; Lechler, A.; Verl, A.: Communication Mechanisms for Cloud based Machine Controls. Procedia CIRP, 17, p. 830-834, 2014.
6. § Friedrich, C.; Lechler, A.; Verl, A.: Autonomous systems for maintenance tasks, requirements and design of a control architecture. Procedia Technology, 15, p. 595-604, 2014.
7. § Schlechtendahl, J.; Kretschmer, F.; Lechler, A.; Verl, A.: Communication Mechanisms for Cloud based Machine Controls. Procedia CIRP, 17, p. 830-834, 2014.

B) Other publications

8. * Schlechtendahl, J.; Zhiqian, S.; Kretschmer, F.; Xu, X.; Lechler, A.: Study of network capability for cloud based control systems, 24th International Conference on FAIM, San Antonio, 20.-23.05.2014.
9. Lechler, A.: Open Architecture. Chapter in CIRP Encyclopedia of Production Engineering (Eds. Laperrière, Reinhart), Springer-Verlag, p. 925-928, 2016

C) Patents

1. Frey, S.; Lechler, A.; Zahn, P.: Kugelgewindetrieb, Patent DE 10 2015 000 487 B3 2016.02.18, 2015

Supervised graduate students since graduation year 2011

No.	Last Name, First Name	Degree	Title of the dissertation	Duration of thesis

Most important research grants since 2011

No.	Research Project	Funding Period	Name(s) of the principal investigator(s)	Funding source and reference number
1	Industrial cloud-based control platform for production with cyber-physical Systems (pICASSO)	10/2013 - 09/2016	Lechler, A.	BMBF, Industrie 4.0
2	Active Research Environment for the Next Generation of Automobiles (ARENA 2036). Project: Versatile Production	07/2013 - 06/2018	Lechler, A. Verl, A. Bauernhansl, T. ...	BMBF, Research Campus
4	Flexible Mini-Factory for local and customized production in a container (CassaMobile)	09/13 - 08/16	Lechler, A.	FP 7 EU, FoF.NMP.2013-6 # 609146
5	Biological Design and Integrative Structures - Fabrication of biomimetic and biologically inspired (modular) structures for use in the construction industry	10/14 - 09/18	Lechler, A. Knippers, J. ...	DFG TRR 141 B04
6	Parallelization of NC Channel algorithms for execution of Multicore-Architectures	11/13 - 10/15	Verl, A. Lechler, A.	DFG
7	Development of an active drive system for prostheses and orthoses; Development of feed forward control technique	01/11/ - 06/13	Lechler, A. Parspour, N.	BMWl, AiF-ZIM
8	MultiCloud-based services for production (MultiCloud)	10/15 - 09/18	Lechler, A.	BMBF
9	Interconnection of mobile CPS in the Production through Real-time Wireless Communication	08/15 - 07/17	Lechler, A.	DFG