# **Curriculum Vitae**

# Prof. Dr. Jens Jäkel

HTWK Leipzig University of Applied Science Faculty of Engineering (F ING) Chair of System Theory and Mechatronics

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# **Employment History**

04/2005 – present	<ul> <li>HTWK Leipzig University of Applied Science, Leipzig (Germany)</li> <li>Faculty of Engieneering</li> <li>Chair of System Theory and Mechatronics</li> <li>10/2011 – 03/2019 Dean (elected) of the Faculty of Electrical Engineering</li> <li>and Information Technology</li> <li>04/2019 – 09/2021 Dean (elected) of the Faculty of Engineering</li> </ul>	
03/1998 – 04/2005	<b>Forschungszentrum Karlsruhe</b> , Karlsruhe (Germany) Institute for Applied Computer Science Postdoc / Research Associate	
02/1994 – 12/1995	HTWK Leipzig University of Applied Science, Leipzig (Germany) Department of Electrical Engineering and Information Technology Research Associate	
Academic Qualifications		
01/1996 – 12/1997	<b>HTWK Leipzig University of Applied Science,</b> Leipzig (Germany) Doctoral Student Automation Technology	
07/1999	Karlsruhe Technical University, Karlsruhe (Germany) Department of Mechanical Engineering DrIng. (Ph.D) Thesis: Linguistic Fuzzy Systems and their Application in Modeling and Control	

- 08/1990 1/1994 Leipzig Technical University, Leipzig (Germany) Electrical Engineering Field of Study Control Engineering and Measurement Technology
- 8/1988 07/1990 Moscow Intitute of Chemical Engineering, Moscow (Russia) Electrical Engineering

# Field of Study Automation Technology

# **Research and Teaching Interests**

Modeling and Simulation, Control Engineering, Model-Based Control Design, Machine Learning in Automation and Robotics, Mechatronic Systems Design, Human-Robot Interaction, Human-Machine Interaction

#### **Research Experience**

2017 – present	Design of exoskeleton control applied to the lower limbs (PI)
2014 – present	Safe Human-Robot Interaction (PI)
2014 – 2016	Model-based compressor control (PI)
2013 – 2015	Design methodology for HiL simulations for control engineering of fluid-dynamic systems (PI)
2013 – 2014	Development of robotic handling system for Human-Robot interaction (PI)
2012 – 2014	Development of control system for UAV-camera system (PI)
2011 – 2013	Development of HiL Simulation system for control engineering and test for turbine and compressor
	systems (PI)
2009 – 2011	Development of a Measurement System for Instability Detection in Turbo Compressors (PI)
2009 – 2011	Development of optoelectronic, noninvasive, mobile vision aid (PI)
2003 – 2006	Toxicogenomic responses of Zebrafish embryos (research assistant, data analysis methods)
2002 – 2004	Micro array based analysis of metabolic networks (research assistant, data analysis methods)
1998 – 2002	Automatic design of fuzzy systems for classification and diagnosis (research assistant)
1994 – 1998	Ph.D project on linguistic fuzzy systems for modeling and control (Supervisor: Prof. Ehrlich,
	Prof. Bretthauer)
1994 – 1995	Development of fuzzy control systems for greenhouse climate control (research assistant)

# **Teaching Experience**

- 2005 present Professor for System Theory and Mechatronics, Courses in System Theory, Modeling and Simulation of Dynamic Systems, Design of Mechatronic Systems, Control Theory, Roobtics, Machine Learning
- 2000 2005 Lecture for Computational Intelligence, University of Karlsruhe
- 2000 2004 Lecture for System Theory, University of Cooperative Education Karlsruhe