
Advisory Board



Hans-Jörg Bullinger

Fraunhofer-Gesellschaft
Munich, Germany
hans-joerg.bullinger@zv.fraunhofer.de

Hans-Jörg Bullinger is Prof. Dr.-Ing. habil. Prof. e.h. mult. Dr. h. c. mult., President of the Fraunhofer-Gesellschaft, Corporate Management and Research. He obtained MSc and PhD in Manufacturing at University of Stuttgart and joined the Stuttgart Fraunhofer-Institute of Production Technology and Automation, and became a full-time lecturer at the University of Stuttgart. He served there as Chairman of the University, Head of the Institute for Human Factors and Technology Management (IAT) and of Fraunhofer-Institute for Industrial Engineering (IAO). In 2002 he became the President of the Fraunhofer-Gesellschaft. Among his honors are the Kienzle-Medal, the Gold Ring-of-Honour from the German Society of Engineers (VDI), the Distinguished Foreign Colleague Award from the Human Factor Society, the Arthur Burckhardt Award; Honorary Doctorates (DHC) from the Universities of Novi Sad and Timisoara. He has also received the Cross of Order of Merit and the Officer's Cross of Order of Merit of the Federal Republic of Germany, and the Great Cross of the Order of Merit from the Federal President of Germany. Dr. Bullinger is a member of the German Chancellor's "Council on Innovation and Economic Growth".

Rick J. Echevarria

Intel Corporation
Sales and Marketing Group
Enterprise Solution Sales
Santa Clara, CA, USA
rick.j.echevarria@intel.com



Rick J. Echevarria is Vice President of the Sales and Marketing Group and General Manager of the Enterprise Solution Sales division at Intel Corporation. Before assuming his current position, Rick spent seven years leading Intel®Solution Services, Intel's worldwide professional services organization. Earlier, he spent two years as Director of Product Marketing for Intel's Communication Products Group and as Director of Internet Marketing for the Enterprise Server Group. Before joining Intel in 1994, Rick was a software developer for IBM Corporation in Austin, TX. Rick holds a BS degree in industrial engineering from Purdue University and an MS degree in computer systems management from Union College.

Yael Edan

Ben-Gurion University of the Negev
Department of Industrial Engineering
and Management
Beer Sheva, Israel
yael@bgu.ac.il



Yael Edan is a Professor in the Department of Industrial Engineering and Management. She holds a BSc in Computer Engineering and MSc in Agricultural Engineering, both from the Technion-Israel Institute of Technology, and a PhD in Engineering from Purdue University. Her research is robotic and sensor performance analysis, systems engineering of robotic systems; sensor fusion, multi-robot and telerobotics control methodologies, and human-robot collaboration methods with major contributions in intelligent automation systems in agriculture.

Yukio Hasegawa



Waseda University
System Science Institute
Tokyo, Japan
yukioh@green.ocn.ne.jp

Yukio Hasegawa is Professor Emeritus of the System Science Institute at Waseda University, Tokyo, Japan. He has been enjoying construction robotics research since 1983 as Director of Waseda Construction Robot Research Project (WASCOR) which has impacted automation in construction and in other fields of automation. He received the prestigious first Engelberger Award in 1977 from the American Robot Association for his distinguished pioneering work in robotics and in Robot Ergonomics since the infancy of Japanese robotics. Among his numerous international contributions to robotics and automation, Professor Hasegawa assisted, as a visiting professor, to build the Robotics Institute at EPFL (Ecole Polytechnic Federal de Lausanne) in Switzerland.

**Steven W. Holland**

General Motors R&D
Electrical & Controls Integration Lab
Warren, MI, USA
steven.w.holland@gm.com

Steve Holland is a Research Fellow at General Motors R&D, where he pioneered early applications of robotics, vision and computer-based manufacturing. Later, he led GM's robotics development group and then the robotics and welding support operations for GM North American plants. He served as Director of GM's global manufacturing systems research. He is a Fellow of IEEE and received the Joseph F. Engelberger Award for his contributions to robotics. Mr. Holland has a bachelor's degree in Electrical Engineering from GMI and a Master in Computer Science from Stanford.

Clyde W. Holsapple

University of Kentucky
School of Management, Gatton College of
Business and Economics
Lexington, KY, USA
cwhols@email.uky.edu



Clyde Holsapple, Rosenthal Endowed Chair at the University of Kentucky, is Editor-in-Chief of the Journal of Organizational Computing and Electronic Commerce. His books include *Foundations of Decision Support Systems*, *Decision Support Systems – A Knowledge-based Approach*, *Handbook on Decision Support Systems*, and *Handbook on Knowledge Management*. His research focuses on multiparticipant systems, decision support systems, and knowledge management.

Rolf Isermann

Technische Universität Darmstadt
Institut für Automatisierungstechnik,
Forschungsgruppe Regelungstechnik
und Prozessautomatisierung
Darmstadt, Germany
risermann@iat.tu-darmstadt.de



Rolf Isermann served as Professor for Control Systems and Process Automation at the Institute of Automatic Control of Darmstadt University of Technology from 1977–2006. Since 2006 he has been Professor Emeritus and head of the Research Group for Control Systems and Process Automation at the same institution. He has published books on Modelling of Technical Processes, Process Identification, Digital Control Systems, Adaptive Control Systems, Mechatronic Systems, Fault Diagnosis Systems, Engine Control and Vehicle Drive Dynamics Control. His current research concentrates on fault-tolerant systems, control of combustion engines and automobiles and mechatronic systems. Rolf Isermann has held several chair positions in VDI/VDE and IFAC and organized several national and international conferences.

Kazuyoshi Ishii

Kanazawa Institute of Technology
Social and Industrial Management
Systems
Hakusan City, Japan
ishiik@neptune.kanazawa-it.ac.jp

Kazuyoshi Ishii received his PhD in Industrial Engineering from Waseda University. Dr. Ishii is a board member of the IFPR, APIEMS and the Japan Society of QC, and a fellow of the ISPIM. He is on the Editorial Board of the International Journal of Production Economics, PPC and Intelligent Embedded Microsystems (IEMS). His interests include production management, product innovation management, and business models based on a comparative advantage.

Alberto Isidori

University of Rome "La Sapienza"
Department of Informatics and Systematics
Rome, Italy
albisidori@dis.uniroma1.it

Alberto Isidori is Professor of Automatic Control at the University of Rome since 1975 and, since 1989, also affiliated with Washington University in St. Louis. His research interests are primarily in analysis and design of nonlinear control systems. He is the author of the book *Nonlinear Control Systems* and is the recipient of various prestigious awards, which include the "Georgio Quazza Medal" from IFAC, the "Bode Lecture Award" from IEEE, and various best paper awards from leading journals. He is Fellow of IEEE and of IFAC. Currently he is President of IFAC.

Stephen Kahne

Embry-Riddle University
Prescott, AZ, USA
s.kahne@ieee.org



Stephen Kahne is Professor of Electrical Engineering at Embry-Riddle Aeronautical University in Prescott, Arizona where he was formerly Chancellor. Prior to coming to Embry-Riddle in 1995, he had been Chief Scientist at the MITRE Corporation. Dr. Kahne earned his BS degree from Cornell University and the MS and PhD degrees from the University of Illinois. Following a decade at the University of Minnesota, he was Professor at Case Western Reserve University, Professor and Dean of Engineering at Polytechnic Institute of New York, and Professor and President of the Oregon Graduate Center, Portland, Oregon. Dr. Kahne was a Division Director at the National Science Foundation in the early 1980s. He is a Fellow of the IEEE, AAAS, and IFAC. He was President of the IEEE Control Systems Society, a member of the IEEE Board of Directors of the IEEE in the 1980s, and President of IFAC in the 1990s.

Aditya P. Mathur

Purdue University
Department of Computer Science
West Lafayette, IN, USA
apm@cs.purdue.edu



Aditya Mathur received his PhD in 1977 from BITS, Pilani, India in Electrical Engineering. Until 1985 he was on the faculty at BITS where he spearheaded the formation of the first degree granting Computer Science department in India. In 1985 he moved briefly to Georgia Tech before joining Purdue University in 1987. Aditya is currently a Professor and Head in the Department of Computer Science where his research is primarily in the area of software engineering. He has made significant contributions in software testing and software process control and has authored three textbooks in the areas of programming, microprocessor architecture, and software testing.

Hak-Kyung Sung


Samsung Electronics
Mechatronics & Manufacturing
Technology Center
Suwon, Korea
hakksung@samsung.com

Hak-Kyung Sung received the Master degree in Mechanical Engineering from Yonsei University in Korea and the PhD degree in Control Engineering from Tokyo Institute of Technology in Japan, in 1985 and 1992, respectively. He is currently the Vice President in the Mechatronics & Manufacturing Technology Center, Samsung Electronics. His interests are in production engineering technology, such as robotics, control, and automation.

Gavriel Salvendy


Department of Industrial Engineering
Beijing, P.R. China

Gavriel Salvendy is Chair Professor and Head of the Department of Industrial Engineering at Tsinghua University, Beijing, Peoples Republic of China and Professor emeritus of Industrial Engineering at Purdue University. His research deals with the human aspects of design and operation of advanced computing systems requiring interaction with humans. In this area he has over 450 scientific publications and numerous books, including the Handbook of Industrial Engineering and Handbook of Human Factors and Ergonomics. He is a member of the USA National Academy of Engineering and the recipient of the John Fritz Medal.

George Stephanopoulos

Massachusetts Institute of Technology
Cambridge, MA, USA
geosteph@mit.edu



George Stephanopoulos is the A.D. Little Professor of Chemical Engineering and Director of LISPE (Laboratory for Intelligent Systems in Process Engineering) at MIT. He has also taught at the University of Minnesota (1974–1983) and National Technical University of Athens, Greece (1980–1984). His research interests are in process operations monitoring, analysis, diagnosis, control, and optimization. Recently he has extended his research to multi-scale modeling and design of materials and nanoscale structures with desired geometries. He is a member of the National Academy of Engineering, USA.

Kazuo Tanie (Δ)

Tokyo Metropolitan University
Human Mechatronics System Course,
Faculty of System Design
Tokyo, Japan



Professor Kazuo Tanie (1946–2007), received BE, MS, Dr. eng. in Mechanical Engineering from Waseda University. In 1971, he joined the Mechanical Engineering Laboratory (AIST-MITI), was Director of the Robotics Department and of the Intelligent Systems Institute of the National Institute of Advanced Industrial Science and Technology, Ministry of Economy, Trade, and Industry, where he led a large humanoid robotics program.

In addition, he held several academic positions in Japan, USA, and Italy. His research interests included tactile sensors, dexterous manipulation, force and compliance control for robotic arms and hands, virtual reality and telerobotics, human-robot coexisting systems, power assist systems and humanoids. Professor Tanie was active in IEEE Robotics and Automation Society, served as its president (2004–2005), and led several international conferences. One of the prominent pioneers of robotics in Japan, his leadership and skills led to major automation initiatives, including various walking robots, dexterous hands, seeing-eye robot (MEL Dog), rehabilitative and humanoid robotics, and network-based humanoid telerobotics.

Tibor Vámos


Hungarian Academy of Sciences
Computer and Automation Institute
Budapest, Hungary
vamos@sztaki.hu

Tibor Vámos graduated from the Budapest Technical University in 1949. Since 1986 he is Chairman of the Board, Computer and Automation Research Institute of the Hungarian Academy of Sciences, Budapest. He was President of IFAC 1981–1984 and is a Fellow of the IEEE, ECCAI, IFAC. Professor Vámos is Honorary President of the John v. Neumann Society and won the State Prize of Hungary in 1983, the Chorafas Prize in 1994, the Széchenyi Prize of Hungary in 2008 and was elected “The educational scientist of the year” in 2005. His main fields of interest cover large-scale systems in process control, robot vision, pattern recognition, knowledge-based systems, and epistemic problems. He is author and co-author of several books and about 160 papers.

François B. Vernadat


Université Paul Verlaine Metz
Laboratoire de Génie Industriel et
Productique de Metz (LGIPM)
Metz, France
Francois.Vernadat@eca.europa.eu

François Vernadat received the PhD in Electrical Engineering and Automatic Control from University of Clermont, France, in 1981. He has been a research officer at the National Research Council of Canada in the 1980s and at the Institut National de Recherche en Informatique et Automatique in France in the 1990s. He joined the University of Metz in 1995 as a full professor and founded the LGIPM research laboratory. His research interests include enterprise modeling, enterprise architectures, enterprise integration and interoperability. He is a member of IEEE and ACM and has been vice-chairman of several technical committees of IFAC. He has over 250 scientific papers in international journals and conferences.

Birgit Vogel-Heuser

University of Kassel
Faculty of Electrical Engineering/
Computer Science, Department Chair of
Embedded Systems
Kassel, Germany
vogel-heuser@uni-kassel.de



Birgit Vogel-Heuser graduated in Electrical Engineering and obtained her PhD in Mechanical Engineering from the RWTH Aachen in 1991. She worked nearly ten years in industrial automation for machine and plant manufacturing industry. After holding the Chair of Automation at the University of Hagen and the Chair of Automation/Process Control Engineering she is now head of the Chair of Embedded Systems at the University of Kassel. Her research work is focussed on improvement of efficiency in automation engineering for hybrid process and heterogeneous distributed embedded systems.

Andrew B. Whinston

The University of Texas at Austin
McCombs School of Business, Center for
Research in Electronic Commerce
Austin, TX, USA
abw@uts.cc.utexas.edu



Andrew Whinston is Hugh Cullen Chair Professor in the IROM department at the McCombs School of Business at the University of Texas at Austin. He is also the Director at the Center for Research in Electronic Commerce. His recent papers have appeared in Information Systems Research, Marketing Science, Management Science and the Journal of Economic Theory. In total he has published over 300 papers in the major economic and management journals and has authored 27 books. In 2005 he received the Leo Award from the Association for Information Systems for his long term research contribution to the information system field.



<http://www.springer.com/978-3-540-78830-0>

Springer Handbook of Automation

Nof, S.Y. (Ed.)

2009, LXXVI, 1812 p. 1005 illus. in color. With DVD.,

Hardcover

ISBN: 978-3-540-78830-0