



Prof. Marian P. Kazmierkowski  
presents

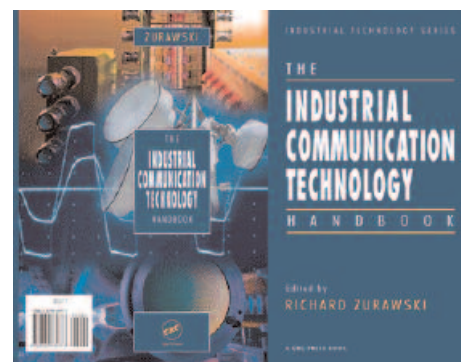
## “The Industrial Communication Technology Handbook” by Richard Zurawski

CRC Press, 2005  
Hardcover, 936 pages,  
ISBN 0-8493-3077-7

A new addition to the Industrial Information Technology Series published by CRC Press Florida, a division of Taylor & Francis Group, is “The Industrial Communication Technology Handbook” edited by Richard Zurawski, an IEEE-IES volunteer. The book offers a mix of basics and advanced material, as well as overviews of recent significant research and implementation/technology developments. The book covers extensively the areas of fieldbus technology, industrial Ethernet and real-time extensions, wireless and mobile technologies in industrial applications, linking the factory floor with

the Internet and wireless fieldbuses, industrial networks’ security and safety, automotive applications, industrial automation applications, building automation applications, energy systems applications, and other. This material is preceded by a few chapters to cover in a nutshell the basics of data communication and IP networks intended as a handy reference for those who may not be familiar with or wish to refresh their knowledge of some of the concepts used extensively in the rest of the book. The book contains 42 contributions grouped in sections for cohesive and comprehensive presentation of the treated areas, written by leading experts from industry and academia directly involved in the creation and evolution of the ideas

and technologies treated in the book. Over half of the contributions are from industry and industrial research establishments at the forefront of the developments shaping the field of industrial communication technology. Most of contributors from industry play a leading role in



### Theme: Getting to Know Socially Intelligent Robots

innovative robot designs for HRI research  
user-centred design of social robots  
novel interfaces and interaction modalities  
long-term experience and longitudinal HRI studies  
evaluation methods and new methodologies for HRI research  
androids  
degrees of autonomy and teleoperation  
human factors and ergonomics in HRI research  
virtual and augmented tele-presence environments  
ethical issues in human-robot interaction research  
robots in education, therapy and rehabilitation  
medical and surgical applications of robots  
robot companions and social robots in home environments  
assistive robotics for supporting the elderly or people with special needs  
applications of social robots in entertainment, service robotics, space travel

and—others  
anthropomorphic robots and virtual humans  
interaction with believable characters  
non-verbal cues and expressiveness in interactions: gesture, posture, social spaces and facial expressions  
interaction kinesics  
monitoring of behaviour and internal states of human subjects  
robotic etiquette  
social intelligence for robots  
social presence for robots and virtual humans  
creating relationships with robots and humanoids  
personalities for robotic or virtual characters  
embodiment, empathy and intersubjectivity in interaction with robotic and virtual characters  
motivations and emotions in robots  
curiosity, intentionality and initiative in interaction  
linguistic communication and dialogue with robots and intelligent interfaces

multimodal interaction and conversational skills  
cognitive and sensori-motor development in robots  
cognitive skills and mental models for social robots  
social learning and skill acquisition via teaching and imitation  
programming by demonstration  
cooperation and collaboration in human-robot teams  
human-robot interaction and collaboration in manufacturing environments  
motion planning and navigation in the vicinity of humans  
machine learning and adaptation in human-robot interaction  
multi-modal situation awareness and spatial cognition  
computational architectures for human-robot interaction  
detecting and understanding human activity  
narrative and story-telling in interaction

#### Conference Chair:

Kerstin Dautenhahn (University of Hertfordshire, UK)

#### Programme Chairs:

Kerstin Dautenhahn (University of Hertfordshire, UK)  
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#### Important Dates

15 February 2006

Deadline for proposals for organized special sessions and tutorials

25 February 2006

Notification for organized special sessions and tutorials

15 March 2006

Submission of full-length papers due

10 May 2006

Notification for paper submissions

10 June 2006

Submission of camera-ready final papers

6-8 September 2006

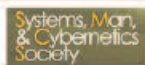
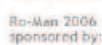
Symposium

the formulation of long-term policies for technology development and are key members of the industry consortia implementing those policies. In presenting the topics, a particular emphasis is on the industrial perspective, illustrated by actual implementations and technology deployments. The reports on recent technology developments, deployments, and trends frequently cover material released to the profession for the first time.

The book is aimed at novices as well as experienced professionals from industry and academia from the fields of electrical and computer engineering, industrial and mechatronic engineering, computer science, and information technology. It is an indispensable companion for those who seek to learn more on industrial communication technology and systems and for those who want to stay up to date with recent technical developments in the field. It is also a rich source of material for any university or professional development course on industrial networks and related technologies.

#### in brief . . .

Richard Zurawski's recent book "Embedded Systems Handbook" is ranked No. 1 of the top seven books on embedded systems. Visit the web-site <http://www.enseirb.fr/~kadionik/embedded/embedded.html>



Robotics & Automation Society

