



Prof. Marian P. Kazmierkowski
presents

"The Industrial Communication Technology Handbook" by Richard Zurawski

CRC Press, 2005
Hardcover, 936 pages,
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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



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.emseirb.fr/~kadionik/embedded/embedded.html>



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
autative in-botics for supporting the elderly or people with special needs
applications of social robots in entertainment, service robotics, space travel

and-of-bots
anthropomorphic robots and virtual human interaction with believable characters
non-verbal cues and expressiveness in interaction: gestures, posture, social space and facial expressions
interaction theories
monitoring of behaviour and internal states of human subjects
in-botic self-optimisation
social intelligence for in-bots
social presence for robots and virtual humans
creating relationships with robots and humans
personality for robotic or virtual characters
emotions, empathy and intelligence in interaction with robotic and virtual characters
motivations and emotions in robots
creativity, intentionality and initiative in interaction
linguistic communication and dialogues with in-bots and intelligent interfaces

multimodal interaction and conversational skills
cognitive and sensor-motor development in robots
cognitive skills and mental models for social robots
social learning and skill acquisition via teaching and imitation
programming by demonstration on cooperation and collaboration in human-robot teams
human-robot in-tention 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
remote and stop-telling in interaction

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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

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