Fieldbus technology : systems integration, networking, and engineering ; proceedings of the Fieldbus Conference FeT'99 in Magdeburg, Federal Republic of Germany, September 23-24, 1999 /

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Monografía

Applications of communication networks lead to radical changes in human life. Fieldbus technology is part of this development acting in close connection to systems control and in critical domains. Equipped with sensitive sensors, fieldbus technology becomes the backbone of many processes of our daily life. In automation technology, fieldbus systems are essential parts of modern applications. In airplanes and in near future also in automobiles, mechanical control is replaced by "x by wire" systems based on fieldbusses, a technique more efficient and flexible, but also cheaper. Moreover, fieldbus technology, used in factories, hospitals, laboratories for the collection of numerous data, enables a more efficient and reliable operation of these complex environments. This book is a collection of articles submitted to the fieldbus conference FeT'99 in Magdeburg, Germany. The articles were reviewed by an international program committee which decided to include some high quality articles not presented at the conference. The book comprises chapters dealing with important aspects of fieldbus technology and reflecting areas of main activity in science and industry: real-time aspects, networking, management, OPC, system aspects, realization, protocol specifications (supplements to introduced fieldbus systems), validation, profile development (i. e. specification of application semantics) and research projects. A further chapter reports on the European harmonization project NOAH

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