Safety Management of Software-based Equipment

Description: A review of the principles of the safety of software-based equipment, this book begins by presenting the definition principles of safety objectives. It then moves on to show how it is possible to define a safety architecture (including redundancy, diversification, error-detection techniques) on the basis of safety objectives and how to identify objectives related to software programs. From software objectives, the authors present the different safety techniques (fault detection, redundancy and quality control). Certifiable system aspects are taken into account throughout the book.

Contents
1. Safety Management.
2. From System to Software.
4. Risk and Safety Levels.
7. Certification.

About the Authors
Jean-Louis Boulanger is currently an Independent Safety Assessor (ISA) in the railway domain focusing on software elements. He is a specialist in the software engineering domain (requirement engineering, semi-formal and formal method, proof and model-checking). He also works as an expert for the French notified body CERTIFER in the field of certification of safety critical railway applications based on software (ERTMS, SCADA, automatic subway, etc.). His research interests include requirements, software verification and validation, traceability and RAMS with a special focus on SAFETY.

Contents:
INTRODUCTION ix
CHAPTER 1. SAFETY MANAGEMENT 1
1.1. Introduction 1
1.2. Dependability 1
1.3. Conclusion 8
1.4. Bibliography 8
CHAPTER 2. FROM SYSTEM TO SOFTWARE 9
2.1. Introduction 9
2.2. Systems of command and control 10
2.3 System 13
2.4 Software implementation 14
2.5. Conclusion 16
2.6. Bibliography 17
2.7. Glossary 17
7.1. Introduction 159
7.2. Independent assessment 159
7.3. Certification 160
7.4. Certification in the rail sector 161
7.5. Automatic systems 171
7.6. Aircraft 171
7.7. Nuclear 171
7.8. Automotive 172
7.9. Spacecraft 172
7.10 Safety case 172
7.11 Conclusion 173
7.12 Bibliography 174
7.13 Glossary 176
CONCLUSION 177
INDEX 179

Order by Fax - using the form below
Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct.

Product Name: Safety Management of Software-based Equipment
Web Address: http://www.researchandmarkets.com/reports/2489171/
Office Code: SCD23H3I

Product Format
Please select the product format and quantity you require:

Quantity
Hard Copy (Hard Back): ☐ USD 96 + USD 29 Shipping/Handling

* Shipping/Handling is only charged once per order.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: Mr ☐ Mrs ☐ Dr ☐ Miss ☐ Ms ☐ Prof ☐
First Name: ___________________________ Last Name: ___________________________
Email Address: * ___________________________
Job Title: ___________________________
Organisation: ___________________________
Address: ___________________________
City: ___________________________
Postal / Zip Code: ___________________________
Country: ___________________________
Phone Number: ___________________________
Fax Number: ___________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets, Guinness Center, Taylors Lane, Dublin 8, Ireland.

☐ Pay by wire transfer: Please transfer funds to:
Account number 833 130 83
Sort code 98-53-30
Swift code ULSBIE2D
IBAN number IE78ULSB98533083313083
Bank Address Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: ____________________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World