1. Record Nr. UNISA996465867103316

Titolo	Formal Methods for Components and Objects [[electronic resource]] : Third International Symposium, FMCO 2004, Leiden, The Netherlands, November 2-5, 2004, Revised Lectures / / edited by Frank S. de Boer, Marcello M. Bonsangue, Susanne Graf, Willem-Paul de Roever
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (VIII, 328 p.)
Collana	Programming and Software Engineering ; ; 3657
Disciplina	005.13/1
Soggetti	Software engineering Programming languages (Electronic computers) Computer logic Operating systems (Computers) Software Engineering/Programming and Operating Systems Software Engineering Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Operating Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	A Theory of Predicate-Complete Test Coverage and Generation -- A Perspective on Component Refinement -- A Fully Abstract Semantics for UML Components -- From (Meta) Objects to Aspects: A Java and AspectJ Point of View -- MoMo: A Modal Logic for Reasoning About Mobility -- Probabilistic Linda-Based Coordination Languages -- Games with Secure Equilibria, -- Priced Timed Automata: Algorithms and Applications -- rCOS: Refinement of Component and Object Systems -- Program Generation and Components -- Assertion-Based Encapsulation, Object Invariants and Simulations -- A Dynamic Binding Strategy for Multiple Inheritance and Asynchronously Communicating Objects -- Observability, Connectivity, and Replay in a Sequential Calculus of Classes -- Timing Analysis and Timing Predictability.

Sommario/riassunto	Formal methods have been applied successfully to the verification of medium-sized programs in protocol and hardware design. However, their application to the development of large systems requires more emphasis on specification, modelling and validation techniques supporting the concepts of reusability and modifiability, and their implementation in new extensions of existing programming languages. This book presents revised tutorial lectures given by invited speakers at the Third International Symposium on Formal Methods for Components and Objects, FMCO 2004, held in Leiden, The Netherlands, in November 2004. The 14 revised lectures by leading researchers present a comprehensive account of the potential of formal methods applied to large and complex software systems such as component-based systems and object systems. The book provides an unique combination of ideas on software engineering and formal methods that reflect the expanding body of knowledge on modern software systems.

2.

Record Nr.	UNINA9910795798803321
Autore	Ward David D (Electronics engineer)
Titolo	Automotive cybersecurity : an introduction to ISO/SAE 21434 / / by Dr. David Ward and Paul Wooderson
Pubbl/distr/stampa	Warrendale, Pennsylvania : , : SAE International, , 2021 ©2022
ISBN	1-4686-0083-4 1-4686-0081-8
Edizione	[1st ed.]
Descrizione fisica	1 online resource (1 PDF (xii, 93 pages)) : color illustrations
Disciplina	629.2826
Soggetti	Automotive computers - Security measures Computer security - Standards COMPUTERS / Security / General TECHNOLOGY & ENGINEERING / Automotive TRANSPORTATION / Automotive / General Computer security Automotive technology and trades Road and motor vehicles: general interest
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di bibliografia	Includes bibliographical references (pages 85-89) and index.
Nota di contenuto	Preface -- About the authors -- Chapter 1: Introduction to automotive cybersecurity -- Chapter 2: Cybersecurity for automotive cyber-physical systems -- Chapter 3: Establishing a cybersecurity process -- Chapter 4: Assurance and certification -- Chaper 5: Conclusions and going further -- References -- Index.
Sommario/riassunto	Industries, regulators, and consumers alike see cybersecurity as an ongoing challenge in our digital world. Protecting and defending computer assets against malicious attacks is a part of our everyday lives. From personal computing devices to online financial transactions to sensitive healthcare data, cyber crimes can affect anyone. As technology becomes more deeply embedded into cars in general, securing the global automotive infrastructure from cybercriminals who want to steal data and take control of automated systems for malicious purposes becomes a top priority for the industry. Systems and components that govern safety must be protected from harmful attacks, unauthorized access, damage, or anything else that might interfere with safety functions. Automotive Cybersecurity: An Introduction to ISO/SAE 21434 provides readers with an overview of the standard developed to help manufacturers keep up with changing technology and cyber-attack methods. ISO/SAE 21434 presents a comprehensive cybersecurity tool that addresses all the needs and challenges at a global level. Industry experts, David Ward and Paul Wooderson, break down the complex topic to just what you need to know to get started including a chapter dedicated to frequently asked questions. Topics include defining cybersecurity, understanding cybersecurity as it applies to automotive cyber-physical systems, establishing a cybersecurity process for your company, and explaining assurances and certification.