

1. Record Nr.	UNINA9910831081603321
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Titolo	Validation of communications systems with SDL [[electronic resource]] : the art of SDL simulation and reachability analysis / / Laurent Doldi
Pubbl/distr/stampa	Chichester ; ; Hoboken, NJ, : Wiley, c2003
ISBN	1-280-27197-3 9786610271979 0-470-29983-5 0-470-86482-6 0-470-01415-6
Descrizione fisica	1 online resource (312 p.)
Disciplina	621.382 621.38450113
Soggetti	Wireless communication systems - Computer simulation Mobile communication systems - Computer simulation SDL (Computer program language)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. [289]-291) and index.
Nota di contenuto	Validation of Communications Systems with SDL; Contents; Preface; Foreword; 1 Introduction; 1.1 Validation of Communications Systems; 1.2 SDL, Language to Master Complex Systems Development; 1.2.1 Overview of SDL; 1.2.2 Benefits provided by SDL; 1.3 Simulation Life Cycle; 1.4 Contents of the Book; 1.5 Tools and Platforms Used; 2 Quick Tutorial on SDL; 2.1 Structure of an SDL Model; 2.1.1 System, block and process; 2.1.2 Scope of declarations; 2.1.3 Process; 2.1.4 Procedure; 2.2 Communication; 2.2.1 Signals; 2.2.2 Channel; 2.2.3 Signal route; 2.3 Behavior; 2.3.1 Structure of a transition 2.3.2 Start2.3.3 States; 2.3.4 Input; 2.3.5 Save; 2.3.6 Variables; 2.3.7 Stop; 2.3.8 Task; 2.3.9 Create; 2.3.10 Output; 2.3.11 Decision; 2.3.12 Timers; 2.4 Data Types; 2.4.1 Predefined data; 2.4.2 Array; 2.4.3 Synonym and syntype; 2.4.4 Newtype; 2.5 Constructs for Better Modularity and Genericity; 2.5.1 Package; 2.5.2 Types, instances and gates; 2.5.3 Specialization; 3 The V.76 Protocol Case Study; 3.1 Presentation; 3.2 Specification of the V.76 Protocol; 3.2.1 Abbreviations

used; 3.2.2 Exchange identification procedures (XID); 3.2.3 Establishment of a data link connection
 3.2.4 Information transfer modes
 3.2.5 Release of a DLC; 3.3 Analysis
 MSCs for the V.76 Protocol; 3.4 The SDL Model of V.76; 3.4.1 The simulation configuration of V.76; 3.4.2 The package V76; 3.4.3 The block dataLink; 4 Interactive Simulation; 4.1 Principles; 4.2 Case Study with Tau SDL Suite; 4.2.1 Prepare the Simulator; 4.2.2 Validate against the main scenarios; 4.2.3 Detect a bug in the SDL model; 4.2.4 Detect nonsimulated parts; 4.2.5 Validate against more scenarios; 4.2.6 Write a script for automatic validation; 4.2.7 Other Simulator features; 4.3 Case Study with ObjectGeode
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 5.1.2 Specificity of observation with MSCs in Tau SDL Suite
 5.2 Case study with Tau SDL Suite; 5.2.1 Simulate with user-defined rules; 5.2.2 Simulate with a basic MSC; 5.2.3 Simulate with an MSC containing inline operators; 5.2.4 Simulate with an HMSC; 5.2.5 More details on MSCs; 5.2.6 Simulate with observer processes; 5.2.7 More details on observer processes; 5.3 Case Study with ObjectGeode; 5.3.1 Simulate with stop conditions; 5.3.2 Simulate with a basic MSC; 5.3.3 Simulate with a hierarchical MSC; 5.3.4 More details on MSCs; 5.3.5 Simulate with GOAL observers
 5.3.6 More details on GOAL observers

Sommario/riassunto

Validation of Communications Systems with SDL provides a clear practical guide to validating, by simulation, a telecom system modelled in SDL. SDL, the Specification and Description Language standardised by the International Telecommunication Union (ITU-T), is used to specify and develop complex systems such as GSM, GPRS, UMTS, IEEE 802.11 or Hiperlan. Since the downturn in the telecom industry, validating a system before its implementation has become mandatory to reduce costs. This volume guides you step by step through the validation of a simplified protocol layer, from interactive

2. Record Nr.	UNINA9910483467703321
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Titolo	Interpretative Aspects of Quantum Mechanics : Matteo Campanella's Mathematical Studies // by Matteo Campanella, David Jou, Maria Stella Mongiovì
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-44207-1
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (153 pages) : illustrations
Collana	UNIPA Springer Series, , 2366-7524
Disciplina	530.12
Soggetti	Mathematical physics Quantum physics Mathematical Physics Quantum Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	1 Fundamental assumptions -- 2 The state of a quantum system as a subsystem of a composite system -- 3 Relation between the state of a system as isolated and as open -- 4 Universality of the probability function -- 5 Appendix A -- 6 Appendix B -- 7 Appendix C -- 8 Appendix D.
Sommario/riassunto	This book presents a selection of Prof. Matteo Campanella's writings on the interpretative aspects of quantum mechanics and on a possible derivation of Born's rule – one of the key principles of the probabilistic interpretation of quantum mechanics – that is independent of any priori probabilistic interpretation. This topic is of fundamental interest, and as such is currently an active area of research. Starting from a natural method of defining such a state, Campanella found that it can be characterized through a partial density operator, which occurs as a consequence of the formalism and of a number of reasonable assumptions connected with the notion of a state. The book demonstrates that the density operator arises as an orbit invariant that has to be interpreted as probabilistic, and that its quantitative implementation is equivalent to Born's rule. The appendices present various mathematical details, which would have interrupted the

continuity of the discussion if they had been included in the main text. For instance, they discuss baricentric coordinates, mapping between Hilbert spaces, tensor products between linear spaces, orbits of vectors of a linear space under the action of its structure group, and the class of Hilbert space as a category.
